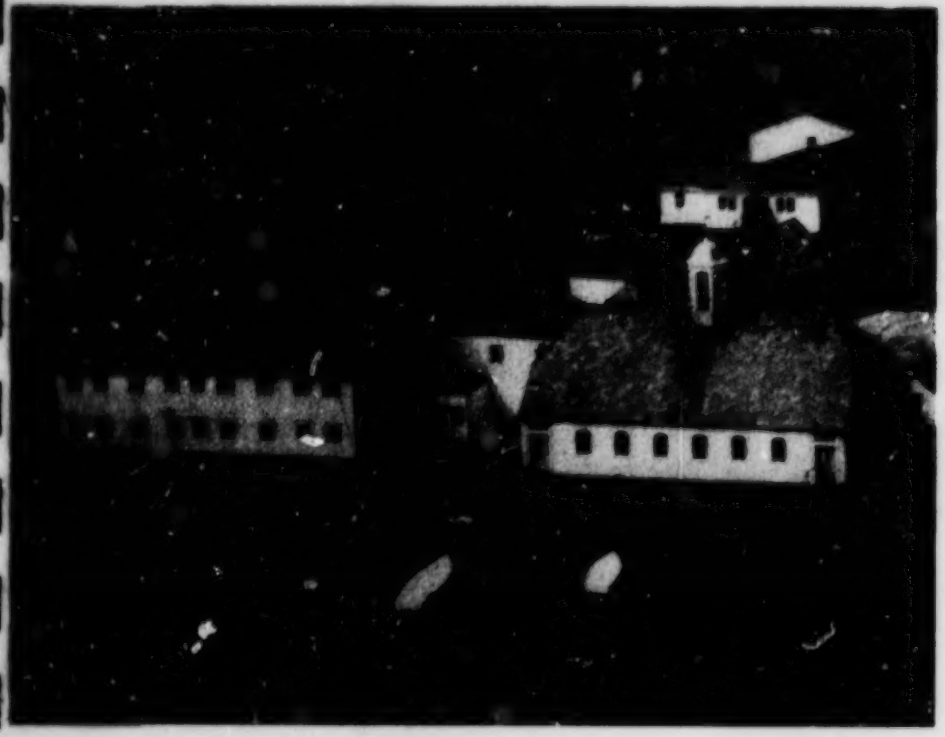

HOPEDALE

MUNICIPAL PLAN

1982 - 1992

ADOPTION AND APPROVAL

Resolved, pursuant to Section 16 of the Urban and Rural Planning Act, that the Council of the Community of Hopedale adopt the Municipal Plan entitled The Community of Hopedale Municipal Plan prepared by DPA Consulting Limited in Association with Project Management & Design Engineering (1974) Limited.

Resolved further, pursuant to Section 18 of the Urban and Rural Planning Act, that the Council apply to the Minister of Municipal Affairs and Housing for the setting of the time and place of a public hearing to consider objections or representations to the adopted plan.

PROPOSED BY: Chesley Flowers

SECONDED BY: Isaac Winters

Certified as a correct copy of a resolution passed at a meeting of Council held at Hopedale *on the* 6th *day of* October *1982.*

Judy Dicker
Clerk

Approved by the Honourable Hazel R. Newhook, Minister of Municipal Affairs on the 31st day of May, 1983.

URBAN AND RURAL PLANNING ACT SEAL AND SIGNATURE

Signed and sealed pursuant to Section 16(3) of the Urban and Rural Planning Act this 6th *day of* October , 1982.

(Seal)

Garfield Flowers

Mayor

CLERK'S CERTIFICATE

Certified that the attached Municipal Plan is a correct copy of the Municipal Plan adopted by the Council of the Community of Hopedale on the 6th *day of* October , 1982.

Judy Dicker

Clerk

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INTRODUCTION

Foreword

This document is a Municipal Plan prepared for the Planning Area of the Community of Hopedale.

There are three separate sections in this document. Introduction which discusses the Plan's legal basis, describes the Municipal Planning Area, and states government and economic policies upon which the Plan is based. The Planning Context provides an overview of Hopedale and a general description of planning policies and implementation projects. The second section, The Plan, contains all policies and forms the effective legal part of the document. It includes goals and objectives of the community and policies for community structure, the various types of land use, and implementation. Appendices, at the end of the report, constitute the third section and contain detailed background information and conclusions on history, land use, community services and facilities, utilities and infrastructure, economic base, population, and engineering requirements.

All goals and objectives, policy statements and maps which are specifically referred to in the section entitled The Plan constitute part of the legally effective Hopedale Municipal Plan. All other material is included for information purposes and shall not be considered a legal part of the Plan.

Introduction

The purpose of planning is to provide a set of guidelines for future growth and development based on certain expectations. This Municipal Plan is the first to be prepared for the Community of Hopedale. It is intended to serve as a guide to the community in the development of new uses, the accommodation of growth, and the provision of services in a healthy, efficient, and pleasant environment.

This Plan is the result of a proposal call by the Department of Municipal Affairs for planning consultants to prepare Municipal Plans for the majority of communities in coastal Labrador, including Hopedale.

The studies were funded by the current Federal-Provincial Labrador Interim Agreement, in furtherance of two of the objectives of the Agreement:

i. "to initiate community infrastructure improvements and services required to enable local residents to actively participate in the development of Labrador." and

ii. "to reinforce the long-term orderly development of Labrador for the benefit of its inhabitants and the Province."

Municipal Planning in Newfoundland and Labrador

In Newfoundland and Labrador, municipal plans are prepared following the requirements of the Urban and Rural Planning Act (R.S.N. 1970) of the province. The steps to be taken and the content of the Plan are clearly set out in Section 15 of the Act.

The purpose of a Municipal Plan is to set out policies for the physical development and improvement of the Municipal Planning Area in a systematic and orderly manner. Planning needs and public concerns play a major role in municipal plans. Particular attention is paid to public convenience and general welfare, economic use of the land, transportation improvements, sewage disposal, water supply, schools, parks and recreation, and other public requirements.

Municipal Planning in Newfoundland and Labrador falls under the control of the Minister of Municipal Affairs.

Under Part II of the Act, any Council may, by resolution, propose to prepare a Municipal Plan. Application, including the resolution, a description of the planning area and a statement of arrangements for preparing the plan, must then be made to the Minister. The Minister may then accept the application or make suitable adjustments to the planning area, and may grant to Council interim control over such defined area until a plan is in place. Council then prepares or makes arrangement to prepare a Municipal Plan showing a scheme for development in the defined planning area, and forwards same to the Minister no later than five years after his initial consent to prepare the plan was given.

A Municipal Plan must be prepared under the direction of qualified planning officers or qualified planning consultants appointed by the authorized Council with the approval of the Minister. The Plan must be prepared on the basis of surveys and studies of land use, population growth, economic vase of the planning area, its present and future transportation and communication needs, public services, social services, etc. The Plan should contain

proposals for the general development of the planning area for a period not exceeding 10 years from the date of its completion, in such a way as to ensure the efficient use of its financial and material resources.

When the Plan is complete, Council considers it and, if satisfied, adopts it. Council then makes known its desire to seek Ministerial approval, giving sufficient notice and making the Plan available for public inspection according to the requirements of the Act. Interested persons can then make objections to the Council. The Minister then appoints a Commissioner to hear such objections and he in turn reports back to the Minister on the hearing.

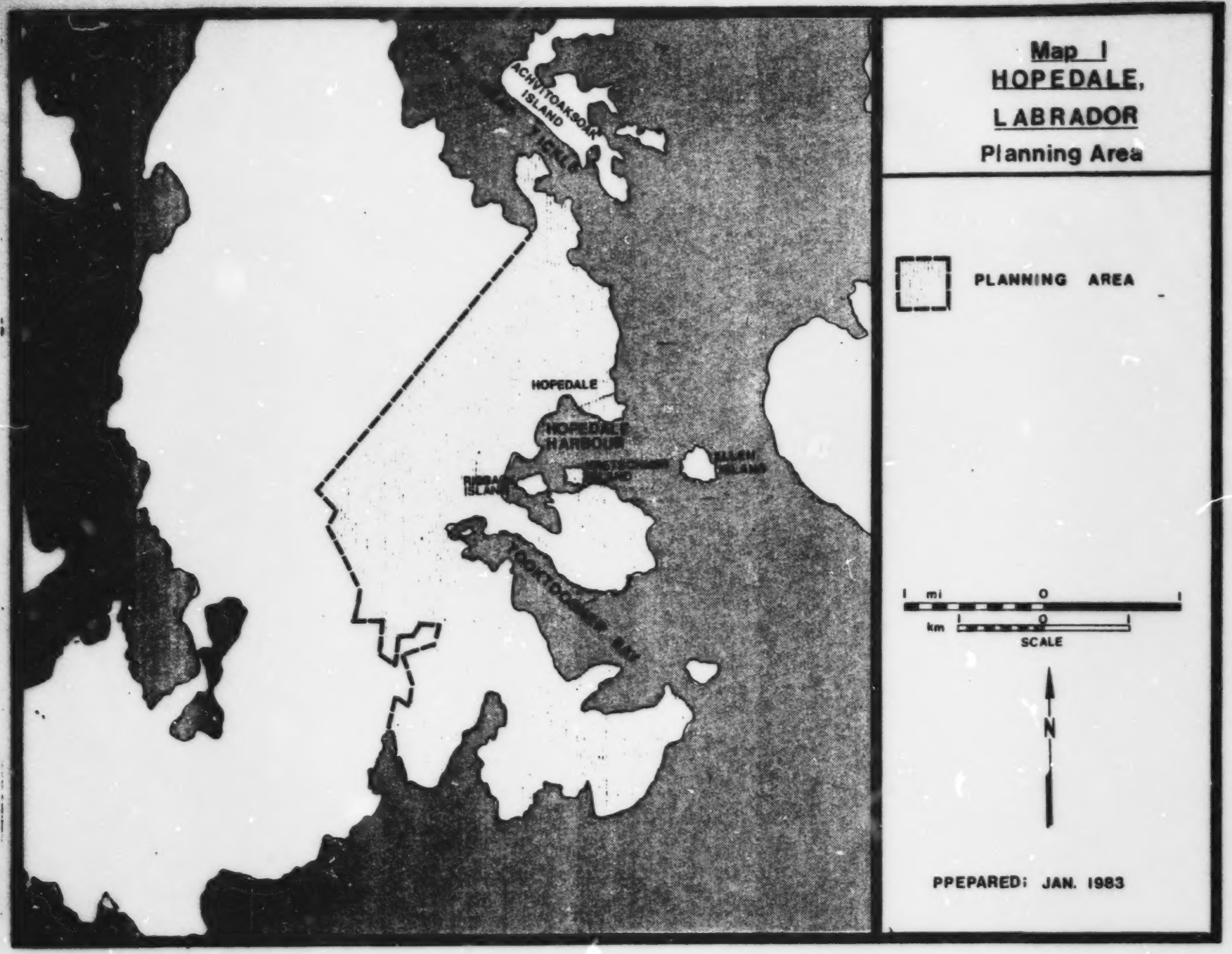
After the hearing, Council applies to the Minister for formal approval of the Plan. The Minister bases his decision on the contents of the Plan and the Commissioner's report. If the Minister gives his approval, the Plan becomes binding on Council and all other persons, corporations and other organisations, both public and private, which are involved in the development of the planning area. Subsequently, Council develops a full scheme for the control of land use in strict conformity with the Plan, which must be approved by the Minister.

While the Plan tries to envision the growth needs of the community over a ten year period, events which are difficult to predict may occur during this time. In response to these new factors, changes in the Plan may be proposed by Council to the Minister of Municipal Affairs. Amendment to a part or parts of the Plan can be made after an examination of the factors and their implications for the development of the community.

The approved Plan, subject to any amendments and regulations, becomes the guide on which all development in the planning area must be based, and to which such development must conform. After approval, the Plan is followed up by a set of Regulations designed to implement the Plan in detail and to control development in the Municipal Planning Area. The Act requires that the Plan be reviewed periodically, every five years after its effective date.

The Community of Hopedale is located on a large peninsula on Hopedale harbour. The Municipal Planning Area encompasses a total of approximately 500 hectares of land and includes the watershed areas of potential water supply sources.

The Planning Area boundaries are shown on Map 1. Starting at Neksarsook Core, the boundary follows in a straight south-westerly direction to the highest point of land (elevation 180 metres), and thence in a southeasterly direction to the southeastern most point of Ussiranniak Cove. The boundary then follows the coastline running north to Black Head Tickle. Kretschmer and Ribback Islands are also included within the Planning Area.



Map 1

HOPEDALE, LABRADOR

Planning Area

PLANNING AREA

1 mi 0 1

km 1 0 1

SCALE

N

PPEPARED: JAN. 1983

The Community of Hopedale is located in northern coastal Labrador, approximately 240 kilometres (150 miles) by air from Goose Bay. Like other communities of the north coast, due to its isolation, Hopedale is highly reliant on the Goose Bay-Happy Valley area for the provision of many essential goods and services. Year-round air service and seasonal shipping are the main links to the outside in addition to television, radio service and telephone.

The planning study for Hopedale has been undertaken in a context of impending change in Labrador. Some of these are more local in nature and others are of a regional nature. Their impacts on the future way of life in Hopedale will therefore vary.

The community has a limited economic base, which is highly dependent upon the fish resources in the coastal waters. In addition, like other communities in northern Canada which are dependent on seasonal sources of income, supplemented by various transfer payments, a significant level of employment is dependent, both directly and indirectly, on the activities of all levels of government. Given these two elements, the economy of Hopedale is highly fragile, being dependent on developments often beyond the direct control of its residents.

In 1981 the population of the community totalled 425. The residents are predominantly Inuit, with some Settlers, in addition to a small number of outsiders. For many, hunting and trapping are essential to their way of life and for their livelihood. For others, they are also a recreation activity and an important part of their lifestyle.

Several potential developments which will influence the future of Labrador are currently being investigated. To a great extent, these are developments which will utilise the substantial resource base in Labrador, notably fish, hydro-electrical power, and minerals such as uranium and oil. Already, the community of Hopedale has felt some influence of oil exploration activity

when Eastcan utilised Hopedale as a staging point for some of its exploration work. Petrocan has now taken over this operation, although the level of onshore activity is not expected to increase. The jobs created are generally on the offshore rigs.

Offshore oil exploration is likely to continue into the foreseeable future, given the prevailing world oil situation and the encouragement of exploration at both the national and provincial levels. Its impact on Hopedale is expected to be limited to a low level, such as that currently experienced, since heavy reliance on Goose Bay as a supply base will continue. To date, no commercially viable wells have been discovered. While gas and oil recovery may have greater impacts, the uncertainty of, and the 6 - 7 year lead time to production, put such considerations beyond the 10-year scope of this plan.

The fishery will continue to provide the main economic base of the community. Fisheries development has potential for Hopedale, although this lies primarily in the area of species diversification into shrimp, turbot and possibly scallops. The effects on Hopedale will depend on the extent to which licences are locally operated and the means and degree of local processing.

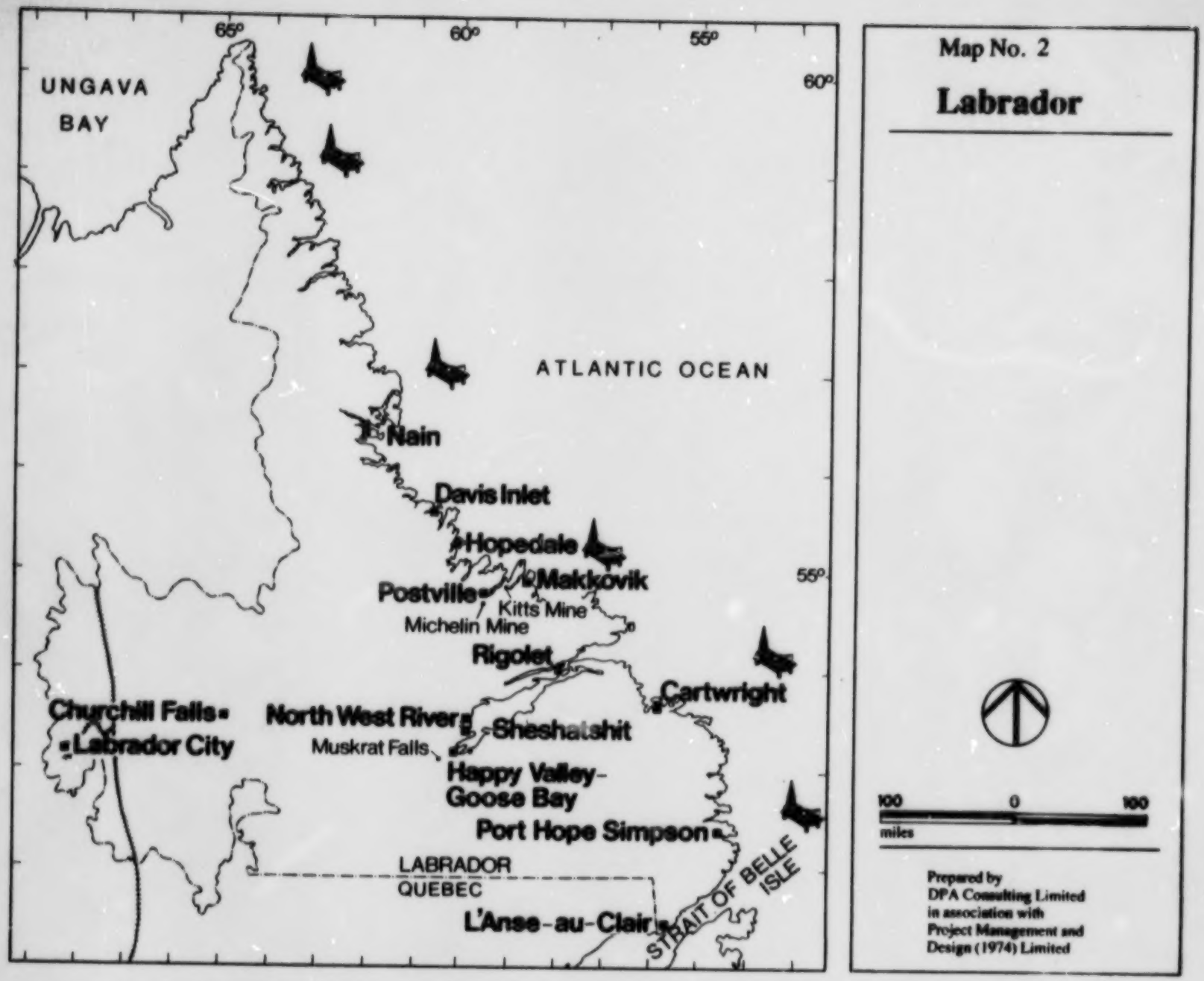
Two major developments which have been under study for several years are the creation of a year round port at North West Point near North West River, and hydro-electric power development at Gull Island and/or Muskrat Falls. A third proposal by Brinex to develop a uranium mine near Postville has been put off indefinitely following environmental hearings and other considerations, although resolution of the environmental problems could reactivate consideration of this mining development. While neither of the two projects under active consideration are firmly committed, the development of either of them would be expected to have more direct impacts on the communities closest to them. However, the introduction to the regional

economy of projects of this scale would be expected to have wide-ranging impacts, which may influence the economy of Hopedale. Key among these would be the demand for labour.

The initiation of any of these projects would mean a significant demand for both skilled and unskilled labour and the prospect of steady work and wages may encourage some residents to seek employment outside Hopedale. In turn, this would make it more difficult for the communities of the coast to undertake new public works if skilled labour is required. The fishery may also be affected by labour shortages if some fishermen leave to pursue construction jobs elsewhere.

Tourism offers some potential for greater job opportunities. The present level of tourism to the community is low, consisting mainly of visitors journeying on the CN coastal boat, Bonavista, and sports fishermen to the fly-in camps nearby. In particular, the Moravian Mission buildings are of historic interest and could be an attraction; Craft sales and tourist accommodation would benefit most directly from increased tourism.

In this context of regional changes, the direct impacts on Hopedale are not expected to alter substantially the seasonal resource-based economy with its reliance on government activities for jobs and income. It is anticipated that any major resource developments will not affect the fish and wildlife resources near the community and alter the lifestyle of those who depend on them. While the rate of population growth will be steady, the key economic issue will be job opportunities and the need for skilled labour.


65°
60°
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UNGAVA
BAY
ATLANTIC OCEAN
Nain
Davis Inlet
Hopedale
Makkovik
Postville
Kitts Mine
Michelin Mine
Rigolet
Cartwright
Churchill Falls
Labrador City
North West River
Sheshatshit
Muskrat Falls
Happy Valley-
Goose Bay
Port Hope Simpson
LABRADOR
QUEBEC
L'Anse-au-Clair
STRAIT OF BELLE
ISLE
Map No. 2
Labrador
100
0
100
miles
Prepared by
DPA Consulting Limited
in association with
Project Management and
Design (1974) Limited

Policy Assumptions

The Hopedale Municipal Plan has been prepared based on the 1982 policies and plans of the Federal and Provincial governments. These include:

1. *Continuation of funding under Federal-Provincial agreements, most notably the new Canada-Newfoundland Coastal Labrador Agreement and the New Native Funding Agreement for Labrador.*

2. *The continued operation of the Hopedale Community Council under the new Municipalities Act (R.S.N. 1979) and other relevent existing legislation.*

3. *The Community of Hopedale will remain in its present location for the foreseeable future.*

ECONOMIC FACTORS

Several assumptions about economic factors have been made for the purposes of preparing this plan, including:

1. *The fish resources of the area will continue to be the ecomomic mainstay of the community providing employment for fishermen and workers in the fish handling facility, and foodstuffs for residents. The fishing industry currently based on salmon, char and cod is unlikely to see major changes in the level of processing i.e. cleaning and ice storage of salmon and char and salting of cod, which takes place in Hopedale. Species diversification will likely provide more jobs and income for Hopedale residents.*

2. *Off-shore exploration for petroleum resources has utilized Hopedale as a staging base. However, projections indicate that levels of activity will be low, with limited direct impact on the community of Hopedale.*

3. *Residents of the community are dependent upon the wildlife resources of the hinterland for food and essential materials for survival and for crafts production. Hunting and fishing for food and materials will continue to be an important aspect of the lifestyle of many of Hopedale's residents.*

The Planning Context

SUMMARY AND CONCLUSIONS

The plan for the Community of Hopedale consists of policies which state the intention of Council to regulate growth and development of the community throughout the 1980's. These policies are based on a survey and analysis of the Community and its growth prospects. The data and information collected are presented in greater detail in the background appendices to this plan. A brief overview of the planning issues and recommended solutions is presented here.

Hopedale was established by the Moravian Mission in 1782 as a service post for the Inuit scattered in small family groups in the bays along the coast. As the settlement has become more developed in the past 30 years, houses and buildings for community uses have taken up most of the available land. The residents rely upon water supplied by wells and a reservoir; there is no municipal sanitary waste disposal system. The most important planning issues in Hopedale are the need for and location of new housing, provision of water and waste services, and growth of the local economy.

Due to the rocky terrain and the constraints this imposes on new development and servicing, there has been considerable discussion on the issue of relocating the Community of Hopedale. A suitable site further inland on Adlatok Bay has often been suggested. While the issue has been hotly debated, ***there has been a policy decision not to relocate the settlement.***

Within the existing townsite, there is very little land for development. The proposed site for new housing is less than ideal, but is the best available without dividing the community into 2 widely-separated sections, which would mean even higher costs.

Growth Prospects

The Community of Hopedale had a population of 425 in 1981. A review of the age distribution of the residents indicates that the small community can expect a high rate of population growth and household formation in the next decade. Total population is expected to reach 475 by 1991 and 522 by 2001.

The primary sector will continue to be the economic mainstay of the community, with reliance primarily on fishing. Given the seasonal nature of almost all jobs in the community, residents are reliant upon government sponsored projects and transfer payments. As with other isolated northern communities, there is a strong desire to educate and train local residents to fill skilled service jobs, and, importantly, to attract back to the community skilled residents who could serve in these positions. The growth in the service employment area is tied to that of the overall population. In Hopedale the number of service jobs is expected to increase in the next decade and it is hoped that more local residents can be trained to fill these positions.

Of primary importance to the growth of population, industrial development such as fish processing and water and sewer servicing, will be the development of a sufficient and reliable water supply. A new water supply which can support the projected level of population growth and be adequate for full municipal services has been identified in the engineering work.

Community Structure

Hopedale is situated on a small rocky peninsula. Its lack of soil and constant exposure to winds are constraints on development. The community is centred on the Mission buildings and wharf, both adjacent to the sea. Housing has been developed around this central area, which also contains the Labrador Services Store, restaurant and sports shop, the school, firehall, nursing station and community hall and crafts centre.

Land for new uses is very limited and while the plan retains the basic established structure of the community, new housing can be accommodated in the existing area through infilling and replacement of older structures, and by multiple family houses. In order to accommodate the projected growth requirements, a new subdivision on suitable lands west of the built-up community is proposed.

Housing

The housing in Hopedale varies in age and quality. Older houses are often founded on wooden or concrete piers. Newer units are built on full or partial concrete basements, although no backfilling occurs. Lot sizes are variable and do not meet Provincial Health and Environment requirements for unserviced dwellings. Further infilling opportunities within the existing built-up area adhering to these standards, are very limited. The plan therefore proposes a residential subdivision area located a short distance from the western edge of the community's built-up area. Here there is some soil on the bedrock and road access to the centre of the community. New road access to the dock will also pass through this area. This area should be fully serviced in order to maximise the number of dwelling units to be accommodated.

Community Services & Facilities

In Hopedale, the uses which serve the community are generally centrally located. These include the mission buildings and cemeteries, nursing station, school, RCMP and municipal buildings. A new recreation building in the same area has recently been constructed. The plan retains these uses in a central location, and allows for upgrading and re-building of the nursing station and completion of the children's playground. Various social programs including alcohol and nutrition guidance and social work are also provided in the community.

Commercial/Industrial

Commercial & industrial uses are restricted to the Labrador Services store, restaurant and sports shop, craft shop, & the fish handling facility and cod salting warehouse. The

store has recently been expanded to meet community needs, and, while some residents sell confectionery from their homes, there are no other retail uses other than the beer store. The plan has designated as Commercial/ Industrial the fish facilities and warehouse, L.S.D. buildings, and a private store, although small retail operations in the residential area will be permitted. Additional vacant centrally located lands are also designated to accommodate future needs such as a new L.S.D. store, hotel, or other commercial use. A commercial area has also been designated near the Community Dock.

The former U.S.A.F. facilities are utilized as a staging and communications base for oil exploration. The base site has been designated as Special Industrial to recognize these uses.

Utilities

Hopedale has 3 major utility uses - the power generating station, the garbage disposal area and fuel storage. The plan requires the relocation of the dump to a properly prepared site more distant from the community and the use of a pit incinerator for waste disposal. An equipment garage nearby is included in the plan. Relocation and dyking of fuel tanks at other locations is a major utility concern, given their present central locations and proximity to other buildings. A major fuel storage area and new power generating site west of the community is proposed.

Transportation

Access to Hopedale is by coastal boat or air. The main wharf is adequate for the coastal boats although the "American dock" is also used by the community. A community owned floating dock is used by Labrador Airways to serve floatplanes, although, in the long run, it is hoped that an airstrip will be constructed to handle most aircraft. A smaller fishermen's wharf requires upgrading for fish handling purposes and a floating dock to accommodate tidal changes is being sought for boat tie-up. A new wharf area has also been designated near the proposed residential subdivision.

The roads in Hopedale are rudimentary, consisting of gravel with many bedrock outcrops. Upgrading of the roads is necessary, and new roads will have to be constructed to access the new residential area to the west, and, hopefully, the proposed airstrip. Wooden decking is also proposed for boggy areas.

Environment and Natural Resources

This section contains policies restricting development in the undeveloped area around the community and protecting watershed areas.

Implementation

The plan proposes that major improvements be undertaken on a priority basis, and funding and approvals sought accordingly. Development is also to conform with the policies and designations set out in the plan.

PLAN

Goals and Objectives

POLICY STATEMENTS

1.1. It is the goal of Council that this Plan serve as a guide to the Community Council in its exercise of powers and responsibilities for the provision of services, the allocation of uses and the development of the community.

General

1.2. It is the goal of Council to provide for an orderly system of growth and development within the Hopedale Municipal Planning Area that fulfills the social, physical, and economic well-being of residents.

1.3. It is the objective of Council to allocate land uses and to develop housing, community services and facilities, and utilities, in accordance with the policies set out in this Plan and in a way which also serves the needs of Hopedale's residents.

1.4. It is the objective of Council to provide residents of Hopedale space to carry on their lifestyle while also preserving the natural environment.

Community Structure

1.5. It is the goal of Council to maintain and improve upon the present land use pattern of community and commercial facilities centrally located ***around the Wharf and Mission area, and provide new housing development in a new area towards the American Dock.***

Residential

1.6. It is the Council's goal to designate land to meet the housing requirements of Hopedale.

1.7. It is the objective of Council to discourage the use of mobile homes and to restrict their use to the designated area of the community.

Commercial

1.8. It is the goal of Council to ensure that commercial operations meet the community's needs, ***and provide adequate visitor accommodation.***

Industrial	1.9.	It is the objective of Council to encourage more industrial activity to provide employment opportunities and diversify the community's economy through the allocation of sufficient lands for industrial use.
Community Services & Facilities	1.10.	It is the objective of Council to provide a range and level of community services and facilities to meet the recreation, social, religious, and educational needs of Hopedale residents.
	1.11.	It is the objective of Council to seek the retention and restoration of the historic Moravian Mission buildings.
Transportation	1.12.	It is the goal of Council to provide a road system which permits safe and efficient movement within the community.
Utilities	1.13.	It is the goal of Council to provide Hopedale with utilities which meet local needs, and locate these utilities in areas which do not conflict with other land uses.
	1.14.	It is the objective of Council to provide the community with a safe and permanent water and waste disposal service.
Environment & Natural Resources	1.15.	It is the goal of Council to restrict development to designated areas and protect the watershed area.
Implementation	1.16.	It is the objective of Council to carry out municipal improvements which meet the policies of the Plan and satisfy the priorities and financial capabilities of Hopedale.

Community Structure

2.1. It is the policy of Council to maintain the established land use pattern with commercial and community facilities centrally located and along the harbour, and residential development spread out around this central area.

2.2. It is the policy of Council to develop those areas designated in the plan for future growth only after vacant lands within the existing community have been considered for new growth.

Residential

Policy Statements

3.1. The Plan provides one type of residential land use designation. It is Residential, which allows single family and multi-family dwellings.

3.2. The areas designated Residential allow the development of single family or multi-family residences.

3.3. Dwellings located in the Residential Area must comply with the implementing land use zoning and subdivision regulations for minimum residential lot and dwelling unit areas on lands provided with municipal sewer and water services.

3.4. Council will encourage the development of smaller residential lots where possible, within the requirements of the Department of Health and other provincial regulations. This will provide for maximum land utilization and minimum servicing costs.

3.5. Dwellings located in a Residential Area and provided with individual wells and waste disposal services must have a minimum lot area as determined by the Department of Health, or any other applicable agency.

3.6. Dwellings shall be sited on lots to create a pleasant residential character and to allow maximum lot usage and minimum land use conflict with surrounding properties.

3.7. Within the Residential area, Commercial uses may be permitted as long as the primary use of the building or lot remains residential.

3.8. While the use of mobile homes is discouraged, application may be made to Council to permit the use of a mobile unit for residential purposes. Mobile homes may only be located on lots within the existing community (i.e. not in the proposed subdivision) and must comply with other provincial regulations.

3.9. Council will permit the development of limited multiple housing, provided traditional forms of housing are unacceptable and the houses are suited to the lifestyle of local residents.

3.10. It is the policy of Council to seek assistance from the federal and provincial governments to provide permanent housing and to avoid mobile home development.

3.11. Council shall encourage the repair of all dwellings in the community and seek the co-operation of the federal and provincial governments through avenues such as the C.H.I.P. and R.R.A.P. Programme.

Community Services and Facilities

4.1. This plan allows for one designation of land use for Community Services and Facilities.

4.2. Uses permitted on lands designated Community Services and Facilities shall include school, health care, community and crafts buildings, mission and religious buildings, recreation and playground areas.

4.3. It is the policy of Council to pursue completion of the Community Hall.

4.4. Council shall provide and manage sufficient lands to meet the outdoor recreation requirements of Hopedale's residents by completing the playground area and providing play space near the school.

4.5. This plan allows for the expansion or re-building of the I.G.A. Nursing Station.

4.6. Buildings of the Moravian Mission are considered to be of historical importance and are to be retained. They should be designated for preservation under Section 17 of the Historic Objects, Sites and Records Act.

4.7. Council will co-operate with the appropriate authorities to seek the continuation of social development programs such as nutrition and alcohol guidance, community development and social counselling.

4.8. It is the policy of Council to establish and equip a volunteer fire brigade and other measures in accordance with the requirements of the Provincial Fire Commissioner.

Commercial/Industrial

5.1. This plan sets out a designation called Commercial/Industrial.

5.2. It is the policy of Council to designate lands for industrial growth to diversify the community's economy and provide new jobs.

5.3. Uses permitted on lands designated Commercial/Industrial include retail shops, shop storage, hotels, and fish processing and storage.

5.4. This plan provides for a land use designation called Special Industrial. The Special Industrial area is to accommodate the buildings and land utilised as a base for resource exploration.

5.5. As some buildings near the American Dock are utilized in conjunction with off-shore oil exploration, these areas are designated Special Industrial.

Utilities

6.1. This plan allows for a land use designation called Utility Area. Uses to be accommodated on such lands include power generation, fuel storage, garbage disposal, and community garage.

6.2. All large fuel tanks in Hopedale shall be properly sited and dyked in accordance with provincial regulations as set out in the Department of Consumer Affairs and Environment Act (R.S.N. 1973).

6.3. Council shall encourage the location of all large fuel storage tanks to the tank area shown on the Proposed Land Use Map.

6.4. It is the policy of Council to establish a new dumpsite in the area designated on the Proposed Land Use Map, of sufficient size to serve the community's needs, with pit incineration facilities in accordance with the provisions of the Waste Material Disposal Act (R.S.N. 1973).

Transportation

7.1. This plan designates lands for Transportation uses; uses to be permitted on these lands include wharf and boat-docking, airstrip and helicopter pad.

7.2. Once **Transport Canada has reached a decision on the location of an airstrip, such land shall be designated on the Proposed Land Use Map.**

7.3. Suitable lands designated for Transportation uses have been allocated to accommodate helicopter landings. Fuel stored at these landing sites must be handled in accordance with Provincial regulations.

7.4. Council shall undertake a program of road improvements. Roads throughout the community shall be maintained and graded on a regular basis.

7.5. Council shall seek improvements to the dock to allow adequate mooring of fishing boats.

7.6. As the new subdivision is developed, it is the policy of Council to seek adequate dock facilities to serve this area.

Natural Resources and Environment

Policy Statements

8.1. Undeveloped lands within the Hopedale Municipal Planning Area are designated a Rural and Resource Area.

8.2. Those lands designated Rural and Resource Area shall be maintained in a natural state with activities restricted to hunting, trapping, agricultural and recreation use.

8.3. It is Council's policy to ensure all new housing is sited to receive maximum sun and minimum wind exposure.

8.4. Council will discourage the cutting of wood within the Rural and Resource Area.

8.5. Lands which drain into any reservoir or pond used as a water supply source shall remain undeveloped.

Implementation

Policy Statements

9.1. The policies of Council as stated in this Plan shall be implemented by measures set out in this section, in addition to Land use Zoning and Subdivision Regulations as adopted by Council.

9.2. Council shall develop a scheme for the control of the use of land in strict conformity with the Municipal Plan, and shall prepare and adopt:

a) zoning plans dividing the Municipal Planning Area into use zones;

b) land use zoning regulations; and

c) subdivision regulations.

9.3. Any development in the Hopedale Municipal Planning Area must comply with the policies of the Plan and with appropriate Provincial and Federal statutes and regulations.

9.4. Proposed development which does not comply with the requirements of this Plan must seek amendment to the Plan and the approval of the Minister of Municipal Affairs.

9.5. The maps A and B titled Proposed Land Use shall represent the location and boundaries of land use related policies and should be read in conjunction with the text.

9.6. Council shall seek the assistance of the Department of Municipal Affairs **in preparing a subdivision plan and prior to undertaking,** surveying or permitting any development.

9.7. It is the policy of Council to commence a capital works program and seek funding from senior levels of government to undertake projects which will implement the policies of the Plan. It is intended that all capital works be classified as immediate (present to 3 years), short term (3 to 5 years), or long term (5 to 10 years) on an annual basis.

9.8. It is the policy of Council to undertake the program of capital works as set out in Schedules 1 and 1A within the financial capability of the Council.

9.9. Given its responsibilities and powers under the Municipalities Act, Council will seek to defray operating costs of municipal services through local revenues, in accordance with provincial cost-sharing formulas.

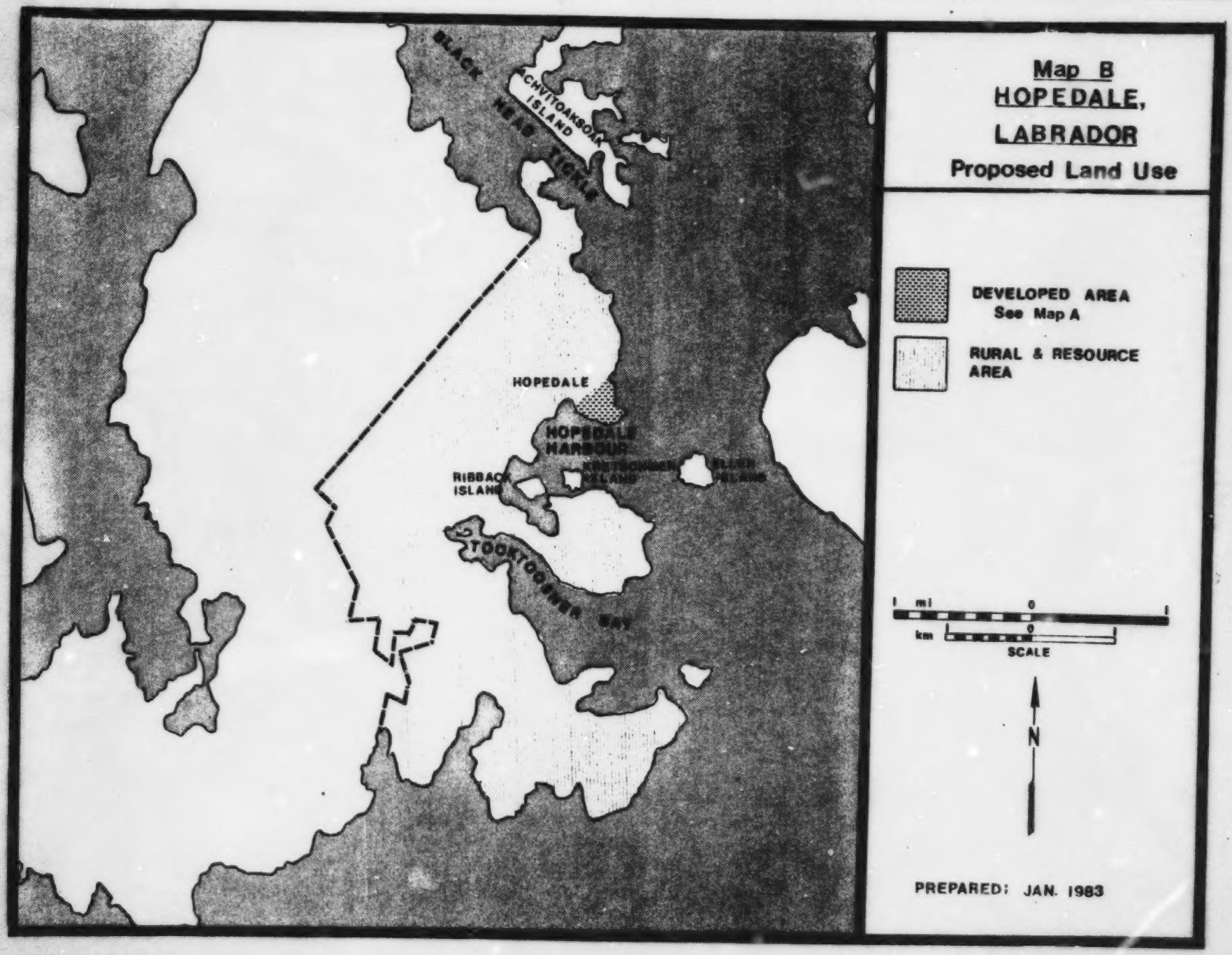
Schedule I

HOPEDALE CAPITAL WORKS SCHEDULE - 1980-1990

ITEM	PRIORITY	RESPONSIBILITY
relocate and dyke all large fuel tanks	immediate	Tank owners, Province
layout and survey new housing area	for 1983	Council, Province
rebuild road to new housing area	immediate	Council, Province
relocate dump and build incinerator	immediate	Council, Province
repair housing	immediate	Owners, Council
acquire heavy equipment for construction and repair	immediate	Council
install floating fishermen's dock	short term	Province, Council
water and sewer services	short term	Council
complete recreation area	short term	Council
build children's playground	short term	Council
upgrade fish plant	long term	Co-Op Province
fire protection	short term	Council, Province
upgrade roads	continuous	Council

Schedule 1A: Summary of Estimated Capital & Operating Costs of Municipal Works

ITEM	LOCATION/OPTION	COST	REMARKS
CAPITAL WORKS			
Water & Sewer	conventional, piped using wells and reservoir	$ 3.0 m.	for existing town only
	conventional, piped using U.S. Base pond	$ 3.2 m.	will also serve new sub-division
New Housing Subdivision	600 m. west of community 33 lots (serviced)	$ 0.75m.	includes surveying, roads, site preparation
Road Improvements	Existing roads	$ 0.5 m.	
Dump	100 m. north of present site	$ 1.0 m.	pit incinerator and municipal garage
Equipment Purchase	Small dozer, loader with backhoe, dump truck	$112,000	to meet basic needs need licenced operator
OPERATING COSTS			
Water & Sewer	piped system	$ 40,000	
Roads maintenance	grading, ditching	$ 35,000	
Garbage collection		$30,000-35,000	
Equipment repairs and maintenance		$ 30,000	need for a mechanic


BLACK HEAD
ACHVITOAKSOAK ISLAND
TICKLE
HOPEDALE
HOPEDALE HARBOUR
RIBBAC ISLAND
TOOKTOOSHER BAY
Map B
HOPEDALE,
LABRADOR
Proposed Land Use
DEVELOPED AREA
See Map A
RURAL & RESOURCE AREA
mi
km
SCALE
N
PREPARED: JAN. 1983

APPENDICES

History

The settlement of Hopedale is located on a rocky peninsula at approximately 55° 30' N. latitude and 60° 15' W. longitude. The present community was established by the Moravian Mission in 1782, although evidence of early Thule culture Inuit ruins have been found. The original Mission building which was built at that time is considered to be one of the oldest frame buildings in Canada. As the community grew, more Mission buildings have been added in the central part of the village. The settlement served primarily as a trading post and service centre for the Inuit population which pursued a nomadic lifestyle based on hunting, trapping and fishing.

In 1952, the United States selected Hopedale as the location for an early warning radar station which was part of the Pine Tree Defense Line. A sizeable complex of radar equipment and support buildings and facilities was built on the rocky hilltop above Hopedale. The facility was phased out and the buildings are used by Petrocan for oil exploration.

Two significant problems of lack of building land and water supply have stimulated debates for the relocation of the community. The present site is constantly subjected to winds from the north-west. Founded on rock, there is little land for new building and the costs of conventional servicing requiring rock excavation will be high.

The present water supply limits future economic and population growth, although this can be remedied by the use of a pond located about 1.5 kms. from the community. Nonetheless, the relocation of the community to a site with more developable land and fewer growth constraints in Adlatok Bay has been considered in recent years. However, no federal or provincial program presently exists to finance relocation. It has therefore been assumed in developing this plan, that the community of Hopedale will remain in its present location and that the issues of community growth and water and land requirements be addressed.

Economic Base

Total employment in Hopedale in the Summer of 1979 was estimated at 138. This included 70 fishermen and 10 fish plant workers, indicating the importance of the fishing industry of Hopedale's economy. Other traditional activities, such as sealing, hunting and trapping, continue to be important sources of livelihood for the community's families as well, and provide employment when the fishing season is closed. Table I summarizes the employment data for Hopedale as recorded during fieldwork in July 1979, when employment is at its peak.

Table I: Hopedale, Labrador - Employment by Occupation, July 1979

Occupation	Number of Jobs
Fishing, Sealing, Hunting and Trapping	70
Fish Handling Facility	10
Teachers and Teachers Aides	15
Construction and Trades	8
Crafts (part-time)	7
Medical	3
Services	
Labrador Air	1
Newfoundland Hydro	5
Municipal	6
Mission	1
Police	2
Social Services	2
Eastcan	2
Retail	5
Post Office	1
Total Employment	138

Source: Fieldwork, DPA Consulting Limited, July 1979

The economy of Hopedale is based on a combination of resource exploitation and government assistance. The fish and animal resources provide income for many residents, in terms of cash, and food, and other materials. It is however only seasonal work, and, for the majority of the year, most residents rely on transfer payments, such as unemployment insurance or social assistance, or other government programs.

Like other northern communities in Canada, there is a high reliance upon jobs provided both directly and indirectly through government activities. A variety of programs, such as L.E.A.P. and Canada Works, and funding sources serve to provide both much needed jobs in the community as well as new facilities. Included among these in Hopedale are construction jobs for new housing, extension to the Labrador Services store, and building of the community hall under a Canada Works grant. Service jobs are provided through programs in craft, recreation and community development, in addition to those in teaching, nursing and social services. The role of government expenditures in the community is therefore very important in terms of generating jobs and income on a year-round basis.

Primary Sector

The catch of the fishermen of Hopedale consists of Salmon, Char and Cod. It is either consumed within the community, or shipped for processing to Makkovik or St. John's after icing or salting. Salmon and Char are abundant in the coastal waters around the community and the catch is iced and sent to Makkovik for processing. The Cod is salted in Hopedale and shipped to St. John's. The fishermen have requested that a dryer be installed in the community's existing fish salting facility to permit further processing of this important resource within the community, although no decision has yet been made on this.

The prospects for increasing employment in the fishing industry appear to be very good, and will probably represent Hopedale's best prospect for

employment growth. Benefits are expected to be directly related to species diversification (e.g. Turbot, Shrimp), the use of licences (e.g. fishermen's Co-op, lease of licence) and the location and method of processing.

The coastal shelf off Hopedale is currently being explored for oil and gas. To date, this activity has indicated oil and gas potential although no wells have been demonstrated so far as being commercially viable. The exploration activity is likely to continue until well into the 1990's and the possibility of exploitation of oil and gas resources is likely to have some impact on Labrador's coastal communities. Petrocan has taken over the Eastcan exploration role and currently employs two residents of Hopedale, using the former U.S. radar station as a limited operations base. For Hopedale, the main impact is likely to be that coastal communications and services will improve. The community is not expected to serve as a major staging point for exploration crews and equipment, and the level of operation by Petrocan in the next few years is expected to continue to be limited in size and seasonal (June to October). Representatives have indicated that the majority of new jobs related to their activities are on the drill ships rather than the land bases.

Metal and mineral exploration inland from Hopedale is also active. The area is rich in various deposits, and valuable resources may be located in the area in the future. However, commercial exploitation of such deposits must be expected to be many years away.

Sealing, hunting and trapping are important to the community's economy. Sealskins and furs add significantly to the cash income of the community. Most of the hunting is undertaken as a non-commercial activity providing food and by-products for domestic use. Hunting and trapping also provide the raw materials for Hopedale's handicraft workers.

Manufacturing

The production of handicrafts is encouraged by the Council and is an important income source. Training facilities and some equipment are provided through the Crafts Council, in co-operation with the Department of Rural Development. Some crafts are sold through the Crafts Shop in Hopedale and some are shipped to Happy Valley for further distribution and sale. The crafts produced in Hopedale are primarily duffle items including parkas, mitts and slippers trimmed with fur and embroidery. Carvings in soapstone and wood are also done in addition to small quantities of bone jewelry.

Craft production takes place both at the Craft Centre as well as at home, due to a lack of space in the Craft building. Expansion and improvement of facilities are urgently needed.

Substantial efforts are being made to encourage craft production in all communities, with an emphasis on saleable, quality items. Craftwork is also taught in the schools and it is hoped that traditional craft skills will be retained and the economic role of crafts as an income source can be expanded. In the next 5 to 10 years, it is anticipated that craftswork will become a more important source of cash income for Hopedale residents, although the number of jobs will vary due to part-time involvement. The success of this economic activity will depend on high standards of quality, production and, importantly, marketing initiatives.

Services

Of the 138 jobs in Hopedale in July, 1979, a total of 45 were in various service categories (teachers, medical personnel and retail staff). Due to the community's relative isolation, Hopedale has developed a fairly high level of self sufficiency with respect to community services. The school, the municipality itself, and Newfoundland Hydro account for a large proportion of the community's service employment. These activities, as well as the IGA, the Moravian Mission, and RCMP and other services, tend to draw highly skilled workers from outside the community, but also provide a substantial number of jobs for Hopedale residents.

The growth prospects for employment in the services sector are generally tied to the growth rate of the population. Population growth in Hopedale increased 1.3% per year from 1971 to 1981. If these growth rates remain at this level, Hopedale's population will reach approximately 452 by 1986. Due to the large population of young people in the community today, strong population growth may be expected until the end of the century (see Appendices: Population, for details). This growth may be expected to provide stimulus for employment growth in various service activities in Hopedale.

Construction and Trades

As shown in Table 1, the construction industry was an important employer in the community in July, 1979 although only a small number of new houses were built each year during the 1970's. Problems related to the lack of available building land and limited funding, and the short building season have contributed to a tight housing supply situation. New housing sites will probably have to be developed at some distance from the existing built-up areas, and a very limited number of new sites may be created through infilling within the existing community.

Development of new subdivision capable of accommodating Hopedale's future growth will contribute to maintaining construction activity at a high level. In addition to new house construction, this activity could require provision of water and sewer services and road building.

Other construction work which will be required in the community in the near future includes work on the road to the "American" dock, hopefully the construction of an airstrip, and a road to the airstrip, and the construction of a community garage and garbage incinerator. Fuel storage facilities require urgent relocation

and dyking, the Community Centre needs to be completed, and the playground needs to be finished. A new recreation building is also urgently required. If Council and various levels of government are able to follow through to provide funding for these projects, significant stimulation of employment in the construction sector in Hopedale may be achieved.

Tourism

Tourism in the Hopedale area is limited at the present time. Visitors on the Bonavista make short stops in the community and are an important market for the sale of handicraft products. Sports fishing also brings in visitors for the duration of the season to fly-in camps in Adlatok Bay and Hunt River. These camps provide seasonal employment for several Hopedale residents.

Two areas which may become significant to increasing tourism in Hopedale are the growth of the "naturalist" tourist market and the historical buildings in the community. The naturalists would be attracted to the community as their requirements do not conflict with the resources upon which the Hopedale economy is dependent. The Moravian Mission buildings are of significant historical interest and stabilisation work on the foundation of the church was recently completed. Once restored, the church will be an important attraction.

Public accommodation and other tourist-related services are limited in Hopedale. Accommodation is presently provided in private homes, although a commercial hotel or tourist home would be an asset to the Community.

Summary

The economic prospects for Hopedale for the coming decade include increased employment opportunities in fishing and fish processing, in various service jobs, crafts production, and in the construction industry. Sealing, hunting, and trapping will continue to be important to the livlihood of many families in the community. The impact of oil, gas and mineral explorations in the area are not expected to be very significant for Hopedale's economy.

At this point in time, the tourism industry is seen as having significant potential, although it will be seasonal in nature.

The population of Hopedale has grown at a substantial rate during the 1970's. The statistics presented in Table 1 indicate an average annual growth rate of 2.0 percent between 1971 and 1981. Hopedale was first identified as a separate community by Statistics Canada in 1971. The Hopedale Community Council was created in 1969. Prior to the 1971 Census, the community's population was included with the population of North Labrador Census Division, Subdivision E.

Table 1: Population Growth 1971 - 1981

Year	Population	Average Annual Change (%)
1971	375	
1976	447	3.58
1981	425	-1.0

Source: Statistics Canada, Population - Geographic Distribution - Census Divisions and Subdivisions, Catalogue 92-802 (1971, 1976). Census Divisions and Subdivisions, Working Document (1981).

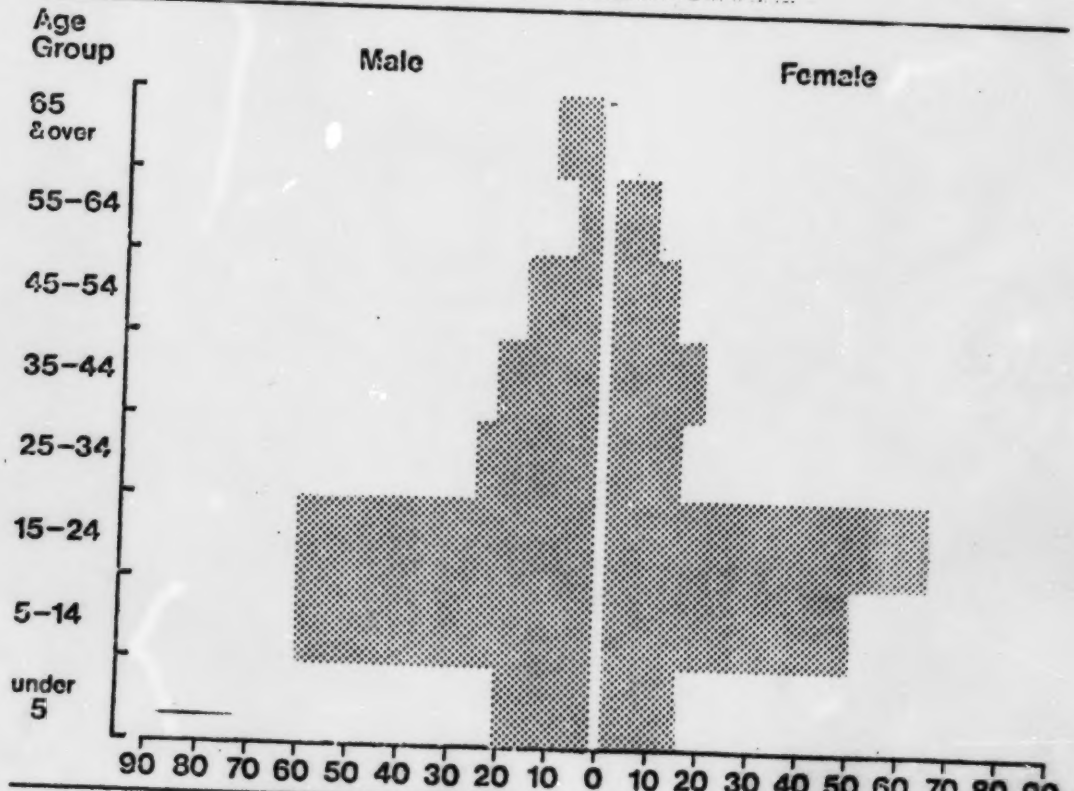
Hopedale's population is relatively young, with a large number of school children. The birth rate has been consistently high. Based on the growth rate between 1971 and 1981, Hopedale's population is projected to reach 452 persons by 1986. Although a high rate of household formation is expected to continue during the last decade of the century, overall population growth is projected to slow down somewhat, to an average of 2 percent per year between 1986 and 1991, and to an average of 1.5 percent per year between 1991 and 2001. At these rates, the 1991 population in the community will reach approximately 475 by 1991, and 522 by 2001.

Table 2: Population by Age & Sex, 1981

Age Groups	Total	Male	Female
TOTAL			
0-4	35	20	15
5-9	45	25	20
10-14	65	35	30
15-19	55	30	25
20-24	70	30	40
25-34	40	25	15
35-44	40	20	20
45-54	30	15	15
55-64	15	5	10
65-69	5	5	-
70+	5	5	-

Source: 1981 Census of Canada

Population Profile — Hopedale



Source: Census of Canada, 1981; unpublished Census Subdivision Demographic Data

Land Use

Community Structure

The Community of Hopedale is situated on a rocky peninsula on the northern coast of Labrador. The settlement is centred around the Moravian Mission buildings, and wharf and fish handling buildings near the sea, with other community buildings and uses in this central area. Houses surround this core of uses spreading to the east and west. At the extremes of the Community are the dump on the east, the former U.S. radar station on the north, and the "American dock", used to serve the radar site on the west. The Base is now used in conjunction with off-shore oil exploration.

This basic structure is retained in the plan. However, constraints imposed by the shortage of good building land will require that a new subdivision be developed in an area not immediately adjacent to the existing community. New and expanded community service buildings and uses can still be accommodated in the central part of the community.

The community of Hopedale faces major constraints on the amount and location of suitable building land due to adverse soil, slope and drainage conditions.

Solid bedrock at or near the surface is prevalent extensively throughout the entire area. Between rock outcrops there exist shallow deposits of sandy gravel or wet, boggy organic soil. This is overlain with turf, sparse low scrub and spruce. The vast prevalence of bedrock constitutes a major concern with the installation of underground services because of the high cost of trench excavation. Gravel deposits are very small and sparsely distributed. What gravel is available on the beach is being used as an aggregate source for pouring concrete foundations. The gravel resource is also considered insufficient for pipe bedding, road grading, or the installation of municipal services, although local rock material can be crushed to provide a suitable source of aggregates. Crushed rock will be required as using beach material is illegal.

Drainage

Surface drainage is a concern in several select sections of the community. These areas are identifiable where the low-lying organic overburden is sandwiched between rock outcrops, and surface water cannot fully drain to the seashore. A particular problem area is in the middle of the settlement below the existing concrete dam. Other surface drainage inadequacies were observed opposite the school, 60-100 metres east of the Moravian Mission, and behind the newly constructed housing units. Some rock excavation, reshaping existing open ditches, replacing and installing additional culverts, should alleviate the more pronounced problem areas.

slope

Lands with a slope in excess of 12 percent are not considered suitable for development in Hopedale. The combination of unsuitably sloped terrain and rock outcrops restricts the amount of available building land.

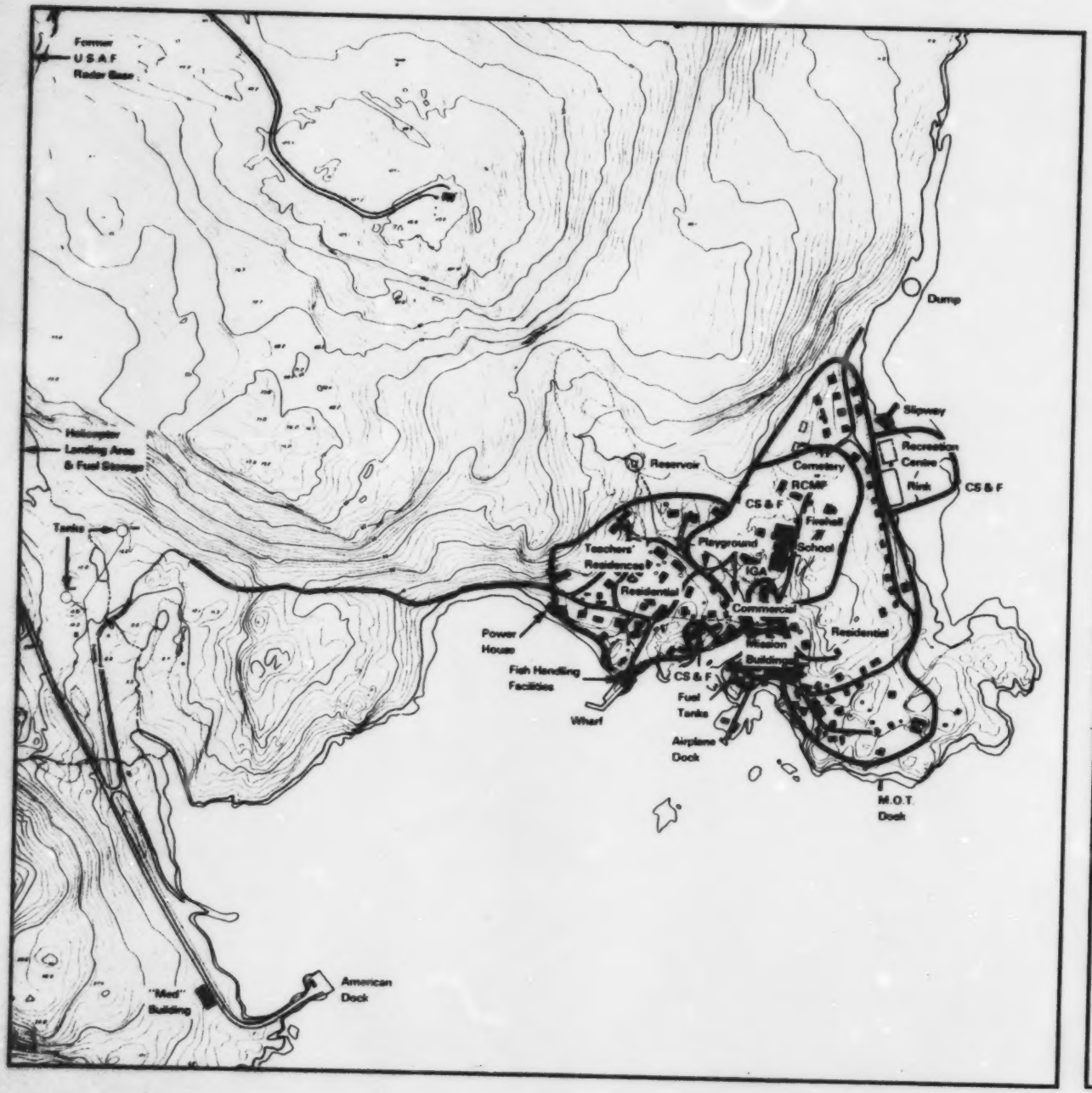
Housing

existing

Hopedale contains approximately 85 houses for its 425 residents. The field survey of housing conditions undertaken in the Summer of 1979 indicated that 40 percent of the housing is in good condition; approximately 40 percent qualifies as fair; 18 percent is in poor condition, and 2 percent are vacant.

These evaluations of building quality are based on a visual survey of house exteriors. They refer to the state and quality of external finishes, level of repair required, and foundations. No assessment of the capability to accept piped water and sewer services has been made, since it is estimated that virtually all dwellings can be serviced at a cost. This would be part of a detailed engineering study. Insulation and heating systems are also excluded.

Housing in "good" condition requires no major repairs apart from routine maintenance, such as painting, replacement of shingles, window glass, etc.



Hopedale, Labrador

Existing Land Use

100 0 100 200
meters

Prepared for
The Community of
Hopedale, Labrador,
and the Department of
Municipal Affairs and
Housing.

Prepared by
DPA Consulting Limited
in association with
Project Management and
Design (1974) Limited

Buildings classified as "fair" require some major work such as new steps and porches, new roof, and major repairs to the exterior cladding. Buildings in "poor" condition often have foundation problems such as rotted or absent posts, and cracks in walls and foundations, in addition to other problems.

housing quality

Many of the existing older houses are of substandard construction quality and have deteriorated severely. Most of the older housing is built on a wood post and concrete footing foundation incorporating a crawl space which is "sheathed-in" with match lumber. Many of the houses in poor condition are those built for residents relocated from Hebron in the early sixties.

New housing units, recently constructed or under construction, have a full concrete basement. The concrete quality is very poor as evidenced by an excessive number of cold construction joints and cracks in the concrete. It is apparent that the building foundations have not been poured monolithically, and it will be a costly undertaking to make these basement walls watertight.

The construction of full basements is a questionable practice in view of the fact that the basement walls are almost totally above grade, and concrete exhibits poor insulating qualities. It would be much simpler to use wood frame construction to the maximum degree possible. It is also easier and less expensive to apply fibreglass insulation between wall studs than equivalent rigid insulation onto concrete walls.

Foundations for 4 new houses were underway in mid-Summer, 1979, although construction of new houses averages 3 per year. The level of construction is based entirely upon the availability of funds, since the majority of houses are built by the Council using monies allocated from the Native Funding Agreement. Changes to the Agreement now mean more responsibility on the part of the individual and the involvement of N.L.H.C.

Few private dwellings exist in addition to those provided for community workers such as the RCMP, social worker, teachers, and nurses.

There is little doubt that the community needs more housing. It is, however, difficult to estimate accurately the full extent of housing needs. While the Council maintains a list of those desiring a house, some are provided with funds for renovation by other means, e.g. Social Services. Household units vary from single mothers to nuclear and extended families. With the provision of a new house, only part of the family may move into the new dwelling.

In addition, dwellings are often occupied on a seasonal basis. Several families use houses in the bays around Hopedale as their Summer fishing base. In Winter, houses may be unoccupied while families are away on hunting trips.

It is estimated that 15 to 20 new houses would allow the community to meet present housing needs including the replacement of dwellings in the poorest condition.

mobile homes

Mobile homes are not particularly suited to the climate of coastal Labrador. Permanently founded pre-cut, pre-fabricated or custom built housing, while not ideal, is far superior and is to be preferred for both environmental and lifestyle reasons. Mobile Homes, however, do provide "instant" housing. While it is difficult to disallow mobile units entirely, some measure of control should be exercised to ensure that mobile units are properly located. This Plan allows mobile homes to be located within the existing community and not in the new subdivision. There is insufficient land for a mobile home park, and the use of such units are to be discouraged.

design standards

The housing design standards used by "pre-cut" home suppliers are not necessarily appropriate for northern coastal Labrador since they do not incorporate any special energy conservation features, nor are the standardized floor plan layouts, which are suitable on the island, appropriate for the lifestyle in coastal Labrador.

It certainly would be worthwhile to develop new housing designs and specifications for government funded housing in coastal Labrador, rather than continuing with importation, without modification, of housing units designed for a much more temperate climate.

If a piped sewer system is installed, there is still some land which can be used for housing lots. A few housing lots could be made available in the middle of the settlement (between the Moravian Church and the teachers' residence near the playground), behind the 2 housing units recently completed near the RCMP station, and along the waterfront south of the ice rink. Lot sizes would have to be a minimum of 1,858 sq. metres if a household septic installation is considered; however, the frontage could be reduced to a minimum (say, 20 metres) with a piped sewer system. The lots available for development are not promising for a septic tank system and are, therefore, not likely to be approved for construction by the Departments of Health and Environment.

new housing area

The Council has expressed a desire to initiate a housing development about 600 metres west of the village, below the existing large (2,273,000 litre) fuel storage tanks. Two small streams flow through the area selected into a valley which is vegetated with low spruce and shrubs. Although there exists some sandy gravel deposits in this region, large masses of exposed bedrock are prevalent.

It would appear that similar soil conditions which plague the community will also be encountered at this site. Furthermore, there is the difficulty and high cost associated with extending water services from the community

to the proposed housing site. The development of a new water supply will be required. (See Engineering Section, pages 55-64).

If houses are constructed in this region it is recommended that crawl spaces at least 0.9 m. high, and preferably 1.2 m., be provided under the dwelling to accommodate water and sewer servicing. It would also be desirable if both the house lot and roadways be built-up with gravel fill a minimum of 0.9 m. In this manner, water and sewer mains, as well as house services pipes could be installed into the fill with a minimum amount of rock excavation.

Community Services and Facilities

As noted, community service and facility uses are centrally grouped in Hopedale. These include the school, nursing station, playground, Mission buildings and cemeteries, and Council offices and crafts building.

school

The school in Hopedale is under the jurisdiction of the Labrador East Integrated School Board. The building which has been recently expanded, contains 10 classrooms, a library, and gym. Shower facilities were built as part of the new addition, although their full connection to water supply and sewage disposal is pending agreement with the Community Council. The school has a capacity for 200 students, although it has a current enrolment of approximately 135 students up to the Grade 11 level. It should serve Hopedale's needs for at least the next 5 years. The school itself is situated on a small site which is almost entirely surrounded by other buildings. The lack of outdoor playspace is acute since the extension has taken over what little land was available. In the long run, the construction of a new nursing station adjacent to the existing one could make available land for playground space (i.e. the site occupied by the existing station). This, however, is only a possible long run solution requiring co-operation of the G.R.H.B., and improvements in the provision of playspace are needed immediately.

recreation

The quantity and quality of outdoor recreation space is inadequate given the size of the young population. In the Summer of 1979, a federal works grant enabled work to begin on the development of a community playground. The site selected is centrally located, although it is crossed by a small stream and is quite boggy. An additional concern is that several septic tanks drain into this area. Scrub vegetation was cleared and some ditching and drainage work undertaken to prepare the site for a children's playground. It is the intention of the community to complete the project to provide much needed recreation space.

Hopedale also has an outdoor ice rink and the community is anxious to enclose the facility due to wind and snow conditions. This, however, is a long term objective, as the Council has not the funds to undertake this construction and is currently building a community hall. This latter facility is funded through government programs (i.e. Canada Works) and is being constructed from materials re-cycled from the U.S. radar base. More funding will be necessary to complete the community hall.

religious buildings and uses

The buildings of the Moravian Mission in Hopedale include a church, mission house and the first Mission building constructed in 1782. All of the buildings are old and are considered to be of historic interest, and could be of significant tourist interest. This Plan proposes their designation under the Historic Objects, Sites & Records Act, Section 17.

The buildings vary in terms of condition, but all are considered to be in need of conservation. The National Historic Sites branch of Parks Canada has plans to begin some stabilization work on the buildings, although this does not include full-scale restoration.

Cemeteries are also considered religious grounds and the two cemetery areas in the village are designated as community services and facilities. In addition, cemetery lands are in need of some attention - fences mended and vegetation trimmed.

nursing station

The Grenfell Regional Hospital Board maintains a nursing station in Hopedale, staffed with two registered nurses and nursing assistants and ancillary staff. The facilities of the station are not fully adequate to meet the Community's needs and the Grenfell Regional Hospital Board is considering expansion or new construction of a nursing station. The change in administration from the I.G.A. to the Grenfell Regional Hospital Board may delay the decision and implementation of plans. Nonetheless, the plan allows for an expanded or new station in the vicinity of the present facility. If a new building is constructed, the site occupied by the present station could possibly be considered to provide much needed recreation space for the school. This, however, is only a long term possibility.

The level of health in the community is generally considered to be good, despite the lack of a municipal water distribution and sewage disposal system. For the majority of residents, water must be brought from the dam to the north of the village and in Summer a 50 mm plastic pipe system is used.

Health problems most recurrent are those related to cleanliness, i.e. skin diseases of scabies and impetigo. The nursing station allows residents to use its bathing facilities for a nominal charge and it is expected that the completion of showers in the school will improve the situation.

The disposal of household and human wastes is a major concern. Certain areas are used for honey bucket disposal although indiscriminate dumping still occurs. The options for a municipal water system and sewage disposal are discussed more fully in the Engineering Section of the Appendices

Commercial and Industrial Uses

commercial

Commercial uses in Hopedale are limited. The primary source of dry and food goods is the Labrador Services store located in the centre of the community. During the Summer of 1979, the building was expanded to provide more sales space and better storage facilities. As the community grows, a new store may be required. The plan allows for a new commercial space on designated lands also centrally located. In addition to the Labrador Services depot, some residents operate retail shops selling confectionery and other small goods from their homes. The only other single-purpose retail outlet in Hopedale is one restaurant & sports shop. This building is located near the Labrador Services store and the site has been designated for Commercial Use.

Industrial

The inshore fishermen of Hopedale process char, salmon and cod. Salmon and char is shipped out fresh in ice, head off, gutted, and further processing is done at the Makkovik Fish Plant. Rock cod is hand split, salted and placed in wet salt bulk storage in two wood frame buildings. The new two-storey facility is in good physical condition and contains generally all essential ancillary services such as a water supply system, lunch room, office, washrooms, etc. required for the level of fish processing being performed.

A 5 ton per day, 25 H.P. Galt "Shell Ice" Machine has been installed on the second floor. The ice produced is stored in an insulated room on the first floor. Condenser cooling water is supplied by a salt water pumping unit, and the fresh water required for making ice is provided from the community seasonal water distribution system. A second salt water pump with a hypochlorinator unit is used for plant washdown.

Council has considered the possibility of establishing a fish cannery in a steel frame building across Hopedale Harbour, which is presently leased to Petrocan. While the feasibility of this proposal has not been explored, its viability seems uncertain in view of the travel distance from the

community over a presently inadequate road, the additional handling cost, and the need for water and hydro services required to operate the facility. Another proposition which may be viable is the construction of a dryer within or adjacent to the existing fish handling/processing facilities and the main shipping dock. The harbour property behind the proposed extension to the fish landing wharf can be readily filled with blasted rock material. A huge mound of bedrock next to the existing fish processing facility could be levelled and the surplus material used for rock fill. In this manner, an area could be developed to accommodate expansion of the local fish processing sector for the foreseeable future and to concentrate it at a central location.

The hill north of the community is occupied by buildings associated with the former U.S. Dew Line radar base. These are now used by Petrocan in association with off-shore oil exploration by The Labrador Group, a consortium of oil companies. In addition, mud used to plug wells is stored near the American Dock. These lands, due to their particular use, are designated as Special Industrial in the Plan.

Utilities

garbage disposal

The present Community dumpsite is situated along the shoreline about 100 metres north of the community. A small incinerator has been erected at the village dumpsite; however, it is not being used because of the full-time attention required to load and unload the unit, and, consequently, open burning is usually practised. Because of the proximity of the dumpsite, odours are prevalent in the community when winds are from the north or northwest.

A more suitable site for the dump is required. Ideally the site selected should be located well away from existing or proposed residential areas, be accessible year round, and be supplied with proper incineration equipment. Three sites have been examined. The first is well north of the community, "around the point" and would necessitate very expensive road construction. A second location is near the pond used as a dumpsite for the USAF Base. Prevailing westerly winds and its proximity to the new

subdivision do not favour this area. The preferred location is about 90 metres north of the present dump in an area which could be quarried for crushed stone for several public works projects and a pit incinerator installed. Details are outlined in the Engineering Section.

fuel storage

Most fuel tanks within the community are poorly sited. The installations present a real fire hazard to local properties and, since they are not properly dyked, they constitute an environmental threat in the event of an oil spill.

Two large 2,273,000 litre fuel tanks are situated about 600 metres west of the community. One of these tanks is used for bulk storage of fuel for the diesel power plant while the other is used by Labseaco. This installation has been dyked; however, locks to prevent unauthorized opening of tank valves have not been provided.

Retail fuel oil and gas is stored in tanks near the waterfront in the community. There are approximately four or five of these tanks which rest on cradles; however, the installations are not dyked, and are located close to existing structures. There are an additional five or six above-ground fuel tanks which serve institutional buildings such as the school, the I.G.A. Nursing Station, etc. Again, the necessary precautions to fully secure the tanks or to contain accidental oil spillage have not been provided.

As a general recommendation, it is suggested that concrete wall and slab dykes be constructed around all tanks. Those over 4 546 litres to be relocated to a central fuel storage area and dyked in accordance with the requirements of the Department of Consumer Affairs & Environment.

power generation

Electrical power in Hopedale is generated by diesel-fuelled generators, operated by the Power Distribution District of Newfoundland & Labrador Hydro. The plans of Newfoundland & Labrador Hydro indicate the desire to re-build this station. The designation of a new power generating site west of the existing diesel generators is proposed.

transportation

Transportation links to the Community of Hopedale are provided by regular C.N. coastal boat services during the normal shipping season and regular air services operated by Labrador Airways. Frequency of the air service varies with the season.

marine

The coastal wharf is an L-shaped structure, constructed of creosoted timber cribwork with a wood plank deck. The primary function of the wharf is to provide berthing for C.N. coastal boats, fuel tankers, and general cargo vessels; however, the lee side of the wharf is used for small boat tie-up.

There also exists a cribbed wharf adjacent to the coastal wharf which is used by Hopedale inshore fishermen as a fish landing facility. Fish landed at this wharf are gutted and split, and then placed into storage at the existing fish holding facility located on shore, approximately 30 metres away. The wood plank deck is viewed as an unsuitable surface for landing fish because of the difficulty of maintaining a clean surface. The installation of a concrete deck on this wharf is recommended.

The elevation of the fish landing wharf is approximately 60 centimetres lower than the coastal wharf. This is deemed as being a desirable feature because of the reduced vertical lifting height to offload fish manually from small boats. The height of the wharf deck will be inconsequential once a fish offloading hoist is installed. Fisheries

and Oceans Canada is currently implementing a program of offloading facilities in inshore communities throughout Newfoundland and Labrador, and similar facilities should be provided at this wharf site.

An extension of the fish landing wharf has been suggested to facilitate small boat berthing in a well sheltered location.

An 18 metre by 5 metre wide wharf extension could be constructed behind the coastal wharf, creating a sheltered basin and additional tie-up space for small boats. This wharf should have a concrete deck and a canopy if fish cutting is continued at the wharf. A chlorinated sea water supply for washing down splitting tables and the wharf deck is highly desirable.

The area behind the proposed wharf extension should be reserved for expansions to fish handling facilities in the community.

The two principal wharves in Hopedale are generally in reasonably good physical condition, and provide adequate service, with the exception of the above comments.

A floating dock facility, owned by the Community Council and leased to Labrador Airways is in place about 185 metres east of the government wharf and appears to provide quite adequate service.

An additional floating dock and/or breakwater has been suggested to accommodate more fishermen's boats and tidal change.

roads

Community roads are generally very narrow and are of poor quality. The extensive outcrops of bedrock through the roadbed and the lack of a substantial gravel borrow pit near the community are the principal considerations affecting road improvements.

In 1976, the Department of Transportation and Communications undertook some road upgrading work along a relatively short section of road (300 metres or so) west of the community towards the former U.S. Radar Base. The roadwork was limited to blasting side slopes and rock-filling low points along the road. No granular base or grading of the roadway was accomplished. The Community Council has no heavy construction equipment and, with the exception of a small tractor, there is no privately owned construction equipment in Hopedale.

While potholes could be filled with beach gravel from time to time, the beach deposits are limited and cannot be relied upon as a gravel source for a comprehensive road upgrading scheme. Granular material for the preparation of an acceptable road bed can only be obtained with a rock crushing operation.

Undoubtedly, granular material for the proposed landing strip and for bedding of any underground piped water and sanitary sewer system will be required. When either of these two capital projects are undertaken, it would then be practical and cost efficient to carry out community road improvements at that time, since a crusher will be mandatory. (See Engineering Section for recommendations).

There are some sections of the road network which are quite wet and boggy. A temporary solution in these areas could be construction of wooden pedestrian walkways.

airstrip

It is understood that an airstrip may be built in Hopedale on Ribback Island in the future.

heliport	*There is no designated landing site for helicopters, and they generally land at any convenient location. One such site is located behind the RCMP station, although this land could be used for more housing. A proper helicopter landing site on the shore near the new municipal garage has been designated in the Plan, in addition to that near the Radar Base.*
Environment & Natural Resources	*The hinterland surrounding the settlement contains the former U.S. radar site, some inaccessible gravel deposits, two potential water supply sources and access to hunting and trapping areas. It is therefore an important resource for the Community, although agriculture and waste disposal (e.g. dump) are permitted uses in such areas.*

Engineering Evaluation of Municipal Service Projects

This section of the plan describes the status of existing facilities for water, waste disposal, garbage handling, and roads. An engineering evaluation, including cost estimates, of new municipal facilities to meet the needs of Hopedale is also provided.

Water System Existing

The present Community water supply is dependent primarily on drilled wells and a small surface water reservoir, created by the construction of a small concrete dam across a local brook. An Engineering Study performed in 1978 involved drilling nine wells, of which only three proved suitable for development as a community water supply.*

The report notes that "ground water is available but in a very limited quantity and, therefore, should be supplemented by surface water to get an adequate supply for a municipal system".

The surface reservoir located above the village provides a limited seasonal (Summer) supply based on a gravity pipe distribution system consisting of an above ground network of 50mm plastic pipe. This water supply is not disinfected and, therefore, is not considered to be a proper community system.

The three community wells are utilized to provide pumped water which is chlorinated at the well head for transport in buckets by hand, or snow-mobile to residences. Enclosures have been constructed around the well pumps for Winter use. This supply is supplemented by transporting water from local surface pondage or stream. In addition, several private wells provide water supplies for buildings such as the school, the nursing station and the RCMP, etc.

* *Labrador Drilling Program in Designated Communities*
Terpstra Municipal Engineering Associates Ltd. Oct. 1978

It is concluded that the estimated sustainable yield of the three drilled wells can just barely satisfy the existing average domestic demand of the community (of 227 litres per capita per day). This provides no margin for population increases, fire fighting, fish processing, industrial or institutional needs. This conclusion is also based on the assumption of developing these wells into a conventional community water supply system with buried insulated pipe distribution.

This existing water supply system is considered to be interim and not acceptable for the long term future needs of the community. If normal North American standards of water supply systems are desired, a completely new design and construction program involving major capital expenditures will be required. Other less costly alternatives which ensure such standards can be maintained are not readily apparent without more detailed study.

Human waste disposal existing

No municipal sewer system exists in the town of Hopedale. Household wastes, collected in honeybuckets, are disposed of in convenient areas, although indiscriminate dumping still occurs throughout the village. This presents a serious health hazard to the community.

Private septic systems serve the teachers' residences, nursing station, RCMP building and the school. The outfalls for some of these septic systems are inadequate and some ground contamination does occur.

Proposed water and sewer system

Hopedale exists in 1980 with a totally inadequate and substandard water and sanitary sewer system. Present measures can only be considered interim. The continued growth of the community and the need to develop efficiently a new residential area, make the installation of a permanent system mandatory.

In evaluating the options and recommending solutions, the following basic principles have served as a guideline.

1. Principles governing water supply in cold regions:

a) Systems should be compatible with environmental conditions prevailing at the site.

b) Fail safe procedures and processes should be incorporated into the design.

c) Simple structures and processes requiring a minimum of gadgetry should be used.

d) Systems that minimize the need for manpower, particularly skilled manpower, should be selected.

e) System must be economically feasible, minimizing capital requirements and operating costs.

2. Principles governing sanitary sewer system in cold regions:

a) System must serve as an effective barrier against disease transmission.

b) System should be dependable at all times and be simple to build and operate.

c) System should be aesthetically acceptable and not degrade the quality of the natural environment.

d) System must be economically feasible, minimizing capital requirements and operating costs.

Several options for water and sanitary services have been considered for Hopedale.

1. *Piped water and sewer systems with several variations, such as:*

a) *Totally serviced water and sewer.*

b) *Water with partial sewer system.*

c) *Water with no sanitary sewer mains. Homeowners to rely on septic tank systems, outdoor privies, or honeybuckets. With the latter two, provision of seepage pits to dispose of greywater must be considered, but may not be feasible due to soil and rock conditions in Hopedale.*

d) *Water supply with or without fire flow capacity.*

2. *Manual systems, hauling water by hand from designated watering points and disposing honeybuckets at designated dumping grounds.*

3. *Vehicular water distribution and sanitary wastes pick-up system with several variations, such as:*

a) *Trucked water only.*

b) *Honeybucket collection only.*

c) *Vehicular system with residences equipped with water holding tanks and sewage pumpout tanks.*

4. *One or more centralized community facilities offering bathing, laundry services, sanitary sewer collection and disposal services, watering point.*

A permanent municipal system, within this context, includes the development of the existing drilled wells, or surface reservoirs, water treatment and piped distribution. A gravit sanitary sewer would discharge to sewer outfalls at the shoreline.

Given the rocky terrain, the costs of installing a piped system will be high. However, measures such as trucked water distribution and honeybucket collection are not considered as feasible, long term, permanent solutions - for reasons discussed on pages 63-64.

Two sources of water supply have been identified - existing wells and the former USAF pond. The existing drilled wells could be linked to provide a water supply system to the existing developed area of Hopedale. This would require pumping and chlorination systems.

Further detailed study is required to ascertain the long term reliability and catchment capacity of the wells for community demand, as the installation of any piped system is accompanied by a rise in daily per capita consumption of water. The design standard used is 227 litres per capita per day.

Use of the existing drilled wells is the less costly of the two options for a water supply; it presents, however, several drawbacks. Apart from the uncertainty respecting the adequacy of this supply for the existing

community, it is clear that the proposed new subdivision area could not be served by this system. Although no testing has been undertaken, drilled wells in the new subdivision are not considered feasible due to ground conditions and proposed lot sizes. A supplementary water supply source would have to be developed in order to provide an adequate level of service. It would also appear that pressure in the existing well system may be inadequate to serve dwellings on higher levels, without the use of costly booster pumps. In addition, it is estimated that operating and maintenance costs will be relatively high, as will be the degree of technical sophistication.

USAF Base Pond

The second alternative is to develop the pond used to serve the USAF base. The pond is located about one kilometre west of the community.

This is the preferred alternative for a permanent water supply. While water must be piped a fair distance to the existing community, the pond is judged to be sufficient to meet the long term needs of the community, including the proposed new subdivision area. It should be noted that development of the subdivision would be contingent upon development of this pond as a water supply source.

Preliminary analysis indicates that a pumped system or gravity system from this pond appears feasible and pressures are more than adequate. For a gravity system, the supply transmission main will require traversing very steep, rock terrain, resulting in relatively costly installation.

Preliminary design parameters

A preliminary cost estimate has been prepared for 2 systems: conventional deep burial piping and shallow burial insulated and heat traced, based on the following parameters:

Design population (year 2000)	750
Average per daily capita demand	227 l/cd
Average daily demand	2 l/sec
Peak demand	6 l/sec

Conventional Deep Burial System Requirements:

1) minimum required earth cover for frost protection - 2.8 metres.

2) size water mains - 100 mm and 75 mm high density polyethylene pipe.

3) size sewer mains - 200 mm high density polyethylene pipe.

4) House services - 25 mm insulated polyethylene water service pipe and 100 mm insulated polyethylene sewer service pipe. Water pipe shall be heat traced and energized by the Owner.

5) Trench rock excavation approximately 85 percent. Common trench excavation, approximately 15 percent.

6) Sanitary sewer effluent shall be disposed of through three (3) 200 mm sewer outfall pipes extending into harbour minimum 1.5 m. below low water ordinary Spring tide, to prevent possible icing and ice damage.

7) Pipe bedding and trench backfill shall be obtained from rock crushing operation.

Shallow Burial Insulated and Heat Traced Requirements:

1) Minimum earth cover all mains - 1 metre.

2) Water main sizes same as for deep burial with 50 mm urethane insulation and heat traced with miminum 13 watt/metre electric trace cable. Heat tracing for standby thawing service only.

3) Sewer main size same as for deep burial with 50 mm urethane insulation (no heat tracing).

4) House services same as deep burial.

5) Assumptions regarding excavation, sewer disposal and pipe bedding same as for deep burial.

Proposed Sewer System

In reviewing the topographical maps of the community and on the basis of on site fieldwork, it appears that most, if not all, existing dwellings can be serviced with piped water and sewer. If a piped water system is installed, a piped gravity sewer system should be incorporated into the design.

It is also suggested that fire flow capacity not be included in the design parameters due to the substantial extra cost for large diameter piping and ancillary components.

Based on the 2 alternatives for water supply, preliminary cost estimates have been developed. These estimates are based on servicing the existing community, including sewers, using the less expensive method of a shallow burial, insulated, heat-traced system.

Option 1: Existing drilled wells, and expansion of reservoir: $3.0 million.

Option 2: Develop new supply using USAF Base pond: $3.2 million.

Other Options

While conventional piped water and sewer servicing is recommended for Hopedale, evaluation of other options has been undertaken.

A manual system, whereby water is hauled by hand from a well head and domestic wastes contained in honeybuckets are disposed at specific, carefully chosen, dumping sites, is an alternative which will involve the least capital costs, and operating costs are minor in comparison to a vehicular distribution system or a central community services complex. This system is very rudimentary and will require all residents to support and comply with government regulations regarding the use of the water supply and disposal of the sanitary wastes. Past experience has shown that policing is a difficult task and pollution hazards and public health risks remain high. Manual systems which are dependent on the performance of each individual resident cannot be considered as an effective barrier against disease transmission.

The existing high density development and the extensive amounts of rock outcrops are the primary factors that generally rule out the practical application of tile fields in Hopedale. Due to the critical lack of soil overburden, septic tank tile beds will not function properly in most locations. In areas where soil conditions permit septic tank systems, close supervision regarding the installation of the septic tank and tile field will be essential to ensure their proper functioning. The topography and related high construction costs contribute to ineffective septic tank construction and discharge pipe operation. Existing septic

tank installations show evidence of surface seepage which is causing contamination.

A trucked water and sewage collection system with each dwelling equipped with a water holding tank and a sewage pumpout tank is deemed somewhat better than a honeybucket collection system; however, the risk of contamination remains high. At least four separate vehicles, two for hauling water and two for domestic wastes, must be provided to allow for maintenance. An all-weather road system is required. The use of all-terrain vehicles is not recommended because of the high capital cost, high servicing and operating costs including some snow clearance and the frequent need for repairs, requiring the services of a skilled mechanic. A vehicular distribution system can certainly serve as an immediate short-term remedy to the problem of providing potable water and sewage collection services in remote northern communities; however, because of relatively high and ongoing operating costs, it is somewhat dubious that a vehicular system is the most attractive proposition in the long term.

A honeybucket collection system is considered as being unsatisfactory because of the high risk of contamination and high operating costs. Local conditions in Labrador militate against the satisfactory performance of a honeybucket collection and disposal system on a permanent basis.

Central bathing facilities with laundry and ancillary services seem best suited for small remote communities with a population of less than 300 to 400 people, and to be successful they must receive full support from the residents. Operating costs are quite significant since full time supervision is mandatory, regular housekeeping tasks must be performed, revenues for use of services must be collected, costs will be incurred for building, heating and upkeep, and for equipment maintenance and operations.

It is therefore recommended that a piped system is by far the most superior alternative in terms of providing a reliable, safe and environmentally acceptable, water and sanitary sewer service for the community. It is recognised, however, that due to the remoteness of the site, the cold climate, and the barren and rocky terrain, a municipal system in Hopedale will be extremely costly to construct, to operate and maintain, in comparison to servicing in more southern regions of the province.

New Residential Development

Hopedale's housing needs for the next 10 years and beyond can be met through a limited amount of infilling and replacement of housing within the existing community, and by development of a new subdivision.

infilling

Good building land in Hopedale is very limited. Rock outcrops, boggy areas, and slopes greater than 12 percent, impose severe constraints. A limited number of new houses can be built within the present village on available sites. Some older housing could also be replaced with new dwellings.

Construction of semi-detached or row housing, particularly if a water and sewer system is installed, will make more efficient use of the land.

new subdivision

A proposed new residential subdivision site is recommended in an area west of the existing community and adjacent to the access road to the old Radar site. The proposed site covers a land area of approximately 3.8 hectares (9.5 acres) and can accommodate 23 lots for single family dwellings. Optimum use of the development is based on dwellings serviced by a piped municipal water and sewer system. Recommended lot sizes are 20 metres by 30 metres with 20 metre frontages. It is deemed impractical to consider the standard larger lot type of development based on individual water and domestic septic tank and tile fields due to the adverse soil conditions.

As noted earlier, development of this subdivision area is contingent upon the development of the water supply using the USAF Base pond. The existing drilled wells are incapable of supplying this area.

This area is the only site suitable for a substantial number of new houses. It is within easy reach of the existing built-up area and can be reached by a road, which will require upgrading in any event.

While other potential sites for a new housing subdivision exist near Hopedale, they are considerably more distant from the existing community than the area proposed. The development of a subdivision more than 1.5 kilometres from the established community would require the construction of new services and facilities, e.g. schools, shops, etc., or the introduction of a year-round bus system in a community with inadequate roads. Due to the additional costs involved in developing such sites, they have been rejected as potential subdivisions.

Certain constraints imposed by this location should also be recognized. The rock outcrops and lack of overburden will impose substantial site development costs. The costs for water and sewer system will be high due to rock excavation, but the terrain is not suitable for septic systems. Below grade basement construction is impractical because of costs.

The area is subject to substantial snow drifting, however, the introduction of structures and streets is expected to alter local conditions somewhat, although snow drifting may pose some problems.

The total site of the subdivision area is limited by the bulk storage tanks and above-ground fuel lines to the west and north of the site.

Community Roads

Community roads are generally narrow and poorly constructed. Many are too narrow for vehicles, and could more properly be classified as footpaths. The lack of granular materials to properly construct road beds, extensive rock outcrops and inadequate provision for drainage, are the major problems.

Despite some work in 1976 by the Department of Transportation and Communications on the road leading westward out of the community, road upgrading and construction to date has succeeded in rough improvement only of a small (approximately 300 metres) section of the road. The Council does not own the necessary equipment to do the required heavy construction work. Maintenance consists of using selected beach gravel to fill pot holes. There is a critical lack of available gravel for this purpose and the resulting work is generally ineffective.

Road construction to conventional engineering standards will require major capital commitments. Crushed stone represents the best probable source of granular material needed for this work.

Some sections of the roads are wet and boggy. As a temporary interim measure, wooden pedestrian walkways should be considered at the more severe locations.

Road Improvements and Maintenance

Assuming a Municipal water and sewer system is installed, major reconstruction of roads will result. In conjunction with this work, road reconstruction and improvements can be effectively and efficiently performed.

Road construction work will involve the same equipment needed for water and sewer construction. Rock excavation of trenches and quarry works can be combined with a rock crusher to produce required granular materials for road bed construction. Ditching and drainage work must be performed to complete the road improvement.

Garbage Collection and Disposal

The Community Council is responsible for providing garbage collection service and disposal. The present dumpsite with its open burning of waste materials, is unacceptable. Odours, smoke and ash drift towards the community when northeasterly winds prevail. A high priority is the relocation of the dump and a better method of disposal of wastes.

The number of locational options for a new dump are limited. Ideally, the dump should be well away and downwind from the community, but relocation costs, due to access needs, would be high.

A site 90 metres further north along the shoreline has been selected to accommodate the dump and it is suggested that a more centralised waste disposal system be put in place. The lack of landfill, together with seasonal and climatic conditions, indicates that a pit incinerator combined with other related Council maintenance activities offers the best overall solution.

It is proposed that a quarry area (which would be required to provide crushed material for water and sewer service installation, road construction, etc.) be so located as to produce a site for a pit incinerator. Surplus crushed aggregates would also be produced to handle landfilling of solid wastes and ashes.

A municipal garage would also be constructed on this site to house Council-owned equipment. (See section on Municipal Equipment and Garage).

The present garbage disposal site should also be cleaned up. Total estimated cost for the construction of the pit incinerator and Municipal garage building, site preparation and restoration of the present dump, is $1.0 million; operating costs are expected to average $50,000 annually.

Following road improvements, the Council must retain sufficient equipment and materials to carry out annual maintenance. It is important that adequate granular materials are produced and stockpiled for a foreseeable period while the heavy construction equipment is at the site.

A good road maintenance program will be dependent on effective equipment maintenance and repair involving qualified operators and mechanics, and adequate garage facilities, tools, and spare parts.

Total estimated cost of road improvements is $0.5 million. Annual maintenance costs are expected to be $30,000.

Community Owned Equipment

The Community Council has no heavy construction equipment and, with the exception of a small tractor, there is no privately owned construction equipment in Hopedale. In order to maintain a piped water and sewer system and local roads, Council should possess at a minimum a large tractor, a rubber-tired front-end loader with a backhoe attachment, and a single axle dumptruck.

Construction and maintenance

Of course, the community must arrange to hire fulltime, a licensed heavy equipment operator who will also have the added responsibilities of performing routine servicing and maintenance of the heavy construction equipment and operating and maintaining all other community services provided by Council; e.g. garbage collection and disposal, water and sewer systems, installation of new house services.

The cost of obtaining this equipment new is estimated to be in the order of $112,000, with maintenance costs in the order of $30,000 annually.

Municipal garage

A municipal garage, with a total of 2000 square metres of space is proposed to house the equipment and to permit its maintenance. Such a building would be constructed as an integral part of the facilities required for garbage handling.

Firefighting and Life Safety

Firefighting and prevention deserve special attention in northern communities. The Council has acquired fire fighting equipment consisting of a sea water gasoline-driven pump with a few hundred metres of hose mounted on a modified "snowmobile" vehicle. The equipment is housed in the fire station located east of the school.

Community fire protection should be focused in three areas, namely fire prevention, life safety, and fire fighting capability.

Regular educational awareness programs in fire safety and prevention should be sponsored. In conjunction with the Fire Commissioner's Office, the enforcement of fire regulations governed by the Fire Prevention Act (R.S.N. 1970) should be assigned to the volunteer fire brigade.

In the event of a fire, early and safe evacuation of the building is of paramount importance. In the case of all public buildings and places of assembly, the National Building Code (1980 Edition now in preparation) should be adopted as the standard governing the design features of all new structures and the Life Safety Code (1976 Edition) as the standard governing minimum fire safety features within existing buildings. Mandatory life safety features in all public buildings should include a sufficient number of exit doors, panic hardware on all exit doors, exit lights, emergency lights, approved fire extinguishers, smoke detectors and an automatic fire alarm system depending on the building occupancy and total area Combustible materials used for interior finishes should exhibit "low smoke development - low flame spread" properties, e.g. painted "fire-rated" gypsum wall board. In the case of new housing units, smoke detectors and fire extinguishers, as previously mentioned, should be a mandatory requirement. A regulation to this effect should be adopted and enforced.

In addition to the environmental hazard posed by the proliferation of fuel storage sites throughout the community and its present method of distribution, it also constitutes a serious fire hazard. The National Fire Protection Association (NFPA) Code has been adopted under the Fire Prevention Act and is a provincial standard. The enforcement of the NFPA Code comes under the jurisdiction of the Fire Commissioner's Office. It is important that Council actively participate in the enforcement of these regulations by notifying the Fire Commissioner's Offices promptly with respect to any breaches observed, and subsequent failure of the party concerned to carry out remedial action promptly. Of particular

significance to the community is the Flammable Liquids Code as it pertains to the handling, storage and distribution of petroleum products. Dyking of all fuel storage tanks is of utmost importance, both from an environmental viewpoint and in the containment of a petroleum fire. In addition, all major critical areas in the community where fuel is being stored, such as wharves, tank farms, landing strips, service stations, etc. should be equipped with either 75 kg. or 175 kg. dry chemical fire extinguishers mounted on a mobile skid. Extinguisher capacity should be determined in consultation with the Fire Commissioner based on a detailed investigation of the fuel depot and its risk factor.

Early warning devices and fire extinguishers are critical tools for detecting and attacking fire in its early stages, and can play a major role in controlling and extinguishing most outbreaks of fire. The successful application of chemicals onto a fire is limited by how close the individual can get to the fire. Once a small fire is out of control, fire extinguishers cannot be effective and external fire fighting capability must be available to control the fire and to protect adjacent properties.

For effective external fire fighting capability, the community must have a water supply source and fire fighting apparatus that can be mobilized quickly with sufficient reach to attack the fire from close range.

Regardless of the fire fighting apparatus provided in the community, its effective use in the event of a fire will only be possible if it is properly maintained and operated by an organized and well trained volunteer fire brigade. Regular training and preplanning the attack strategy is of paramount importance.

Map of Engineering Requirements

Hopedale, like other communities in norther coastal Labrador, has in the past received funding from a number of sources for a variety of public works and community programs. In addition to revenues generated from the usual municipal sources (services fees, road grants, etc.), Hopedale receives funds under the provisions of the Native Funding Agreement for Labrador.

This section examines these sources of revenue which are available to Hopedale and used for municipal purposes, and local projects that may or may not be termed municipal business.

Revenues are generated by Service Fees, Municipal Grants from the Province, and Business Taxes. Grants are also made by the Department of Municipal Affairs for roads and other specific capital expenditure. A breakdown of these revenues and the expenditures for the Community of Hopedale for 1982 are set out below:

Revenues	1982
Business Tax	$ 200.00
Poll Tax	3060.00
Road Grant	6000.00
Population Grant	2384.00
Social Assistance Grant	8356.00
Equipment Rental	6200.00
Nature Funding	8076.00
TOTAL	$34276.00

Expenditures	1982
Salaries	$ 11,520
Office Expenses	1,700
Street Lighting	1,056
Road Maintenance	6,000
Snow Removal	5,000
Garbage	4,800
Operation & Maintenance Water System	4,200
TOTAL	$ 34,276

The Provincial Department of Municipal Affairs introduced in early 1980 a new system of grants to municipal authorities, replacing the previous system. It has two components - a General Municipal Assistance Grant based on population, social assistance and road mileage, and a Tax Incentive Grant based on collections of property taxes.

These two grants are intended to assist municipalities in meeting the cost of providing day-to-day municipal services. The grants are proposed to be paid on a quarterly basis.

The Tax Incentive Grants will be paid only to Municipal Authorities which have a system of property tax in place. Hopedale does not have a property tax system per se, only a system of Service Fees. It, therefore, does not qualify for a tax incentive grant. However, it will qualify as soon as a property tax system is in place. Property taxes are introduced when more than 50% of dwellings are serviced by a municipal water and sewer system.

The amount of government grant for Hopedale for 1980 is as follows:

General Municipal Assistance Grant:

(a)	Population component	$ 2,383
(b)	Social Assistance component	$ 6,124
(c)	Road mileage component	$ 6,000

The New Municipal Grants formula will consist of the following four basic components:

1. A Population component rising on a per capita basis from $5.00 to $20.00 in increments of 75c for every 250 people. Growth is tied to increases in the population.

2. A Social Assistance component based on $1.00 for every $20.00 per capita social assistance paid to residents of the municipality (i.e. 5%). Growth in this component is tied to the incidence of short and long-term social assistance in the municipality.

3. A Road Mileage component fixed at $2,000 per kilometre ($3,200 per local road mile). Growth in this component will be tied to the cost of road maintenance, based on costs normally incurred at present by the Department of Transportation and Communications.

4. A Tax Incentive component of 50c for every $1.00 of property tax collected by the municipality in the previous fiscal year to a maximum collection of $2,000,000 and 25c for every $1.00 collected in excess of $2,000,000. Growth is tied to local tax effort, and the grant will be paid on the basis of collections of property tax, grants in lieu, and water and sewer rates. A property tax system is established in a community when more than 50 percent of the dwellings are serviced by a municipal water and sewer system.

The funds from the two Federal-Provincial Agreements have played an important role in financing local projects in Hopedale. Both Federal-Provincial Agreements are periodically renegotiated. The present DREE Agreement has been in place for approximately 5 years and has recently been extended to March 31, 1982. The New Native Funding Agreement runs to 1986.

The objective of the Native Funding Agreement is to provide services for the native people of Labrador and to promote their social, economic and cultural development. There are 5 basic programs covered under this Agreement - Education: capital and operating costs for schools, additions and teachers' residences; Fisheries: subsidies to fish plants; Housing: construction and repair of housing; Northern Labrador Development: capital and operating costs of Labrador Services stores, including salaries; School dormitory costs in North East River; and Community and Economic Development: recreation, libraries, and various municipal services in addition to crafts, fisheries and tourism promotion and personnel development.

The funds are administered by the Department of Rural Agricultural and Northern Development. Each Council submits an itemized estimate of needs and priorities for the year. For the 1980-81 fiscal year, Hopedale has submitted a proposed budget, listed in order of priority, for its share of the Native Agreement Funding, as follows:

1980-81 Budget Needs

Listed in order of priority:

1)	Dump Truck	$ 25,000.00
2)	Housing - 6 units	240,000.00
3)	Community Worker	10,000.00
4)	Corefunding	25,000.00
5)	Housing Repair	50,000.00
6)	Upgrade Water Dam	10,000.00
7)	Arts and Crafts	10,000.00
8)	Recreation	4,200.00
9)	Alcohol Program	2,000.00
10)	Work Shop (materials)	800.00
11)	Day Care Centre	2,000.00
12)	T.V. Tape Station	3,000.00
13)	Milk Program	4,100.00
	TOTAL	$386,100.00

Budgets for the use of Native Funds for previous years are set out below:

1978-79

Housing	*$140,000.00*
Core Funding	*19,000.00*
Craft Development	*6,000.00*
Cultural Programs	*9,000.00*
Student Employment	*2,000.00*
Community Dev. Worker	*10,000.00*
Maintenance Hockey Rink	*2,000.00*
Renovations Bowling Alley	*3,000.00*
Upkeep of Firehall	*3,000.00*
Engine for Dump Truck	*2,500.00*
	$196,000.00

1979-80

Core Funding	*$ 19,000.00*
Recreation	*2,100.00*
Library	*200.00*
Community Development	*52,971.00*
Community Worker	*10,000.00*
Arts and Crafts	*3,000.00*
Housing	*80,000.00*
	$167,371.00

While the funds are used for a variety of purposes, the main items are the following:

Education:

to provide funds for operation and maintenance of special education programs for native people and grants toward the construction of education facilities.

Fisheries:

subsidies for operation of fish plants to break even (primarily for coastal communities).

Housing:

A significant proportion of funds has often been spent on housing since this is a priority in most communities. Based on materials, labour and delivery charges, the full cost of a new unit is now in the order of $40-50,000. Housing built under the previous Agreement is provided free to anyone requiring it, although it is owned by the Department of Rural Development. The Department has expressed its desire to turn over these houses to local Councils or individuals. The new agreement will provide funds for the construction and maintenance of houses for private owners.

Norther Labrador Development Program:

including Labrador Services stores; student dormitory in North West River; student expenses for post-secondary education; consumers co-operative training program (to train residents to run Labrador Services stores); and Native Travel expenses - for members of the co-ordinating committee.

Community and Economic Development Program:

Core Funding - maintenance and operation of council offices (rents, utilities) professional legal, engineering fees, staff salaries and travel expenses for council business; Library; Recreation - maintenance and improvement of recreation facilities, provision of playground and athletic equipment; Municipal Services - capital and operating funds for garbage disposal, municipal equipment, roads, firefighting, community hall, and limited water and sewer services (this can be funded through the DREE Agreement); Economic Development Projects (e.g. crafts, tourism, fishery), and Consultative Planning Program - 2 resource staff to develop viable proposals.

Funds provided through the DREE Interim Subsidiary Agreement are for projects which promote economic development. These have included community planning studies, public works, such as water and sewer, and development of the fishing resources.

Administration

The Community Council has recognised the need for assistance in the tasks of municipal administration and provision of services. In the past, Council has hired a town manager and/or clerk to handle these responsibilities, although these positions have not been filled on a regular and continuing basis. As a result, accounting and record keeping procedures have not been strictly followed, resulting in poor and inadequate records and management.

The Council recognises the need for a trained clerk to handle and maintain files and financial affairs and to institute proper municipal administration procedures. Depending on the nature and growth of community responsibilities, Council may hire a manager. More regular contact with and advice from the Department of Municipal Affairs and Housing on administration and procedures will be sought by Council.

Housing in a Northern Environment

Energy Efficiency

The pre-cut and prefabricated, single family bungalow purchased to date for erection and occupancy in Labrador is in many ways unsuited to the environment and lifestyle needs.

A key concern is energy efficiency and an examination of the houses indicates that extra standards for these units should be established, in addition to careful construction techniques.

High standards for insulation of walls, ceilings and floors is essential. It is not sufficient to simply install the insulation material. Its proper installation with due regard for the vapour barrier, and proper and adequate ventilation will improve the efficiency of the insulation. The importance of the vapour barrier cannot be stressed strongly enough, and thorough inspection of the installation of the barrier is essential prior to the installation of the interior wall covering.

The greatest heat loss from well insulated buildings is through and around windows and doors. To minimize this loss, these should be well made and tightly fitted. Windows should be double-glazed, with the frame of wood (and not aluminum) construction, possibly with vinyl coating. All spaces around the framing for doorways and windows must be packed with insulation and the exterior cracks caulked with a high quality caulking compound.

To further reduce the heat loss through windows, particularly at night, insulated shutters can be added, preferably on the interior of the building. These can be of a sandwich type construction to match the room finish or complement the exterior cladding. In northern areas where extremely low temperatures are common, these shutters would be best installed on the interior to avoid the need to open windows to use the shutters.

Site Planning

In preparing a site plan for a housing development in the north, consideration must be given to the fact that there are fewer daylight hours and the lots should be laid out in such a way that each housing unit will receive the maximum exposure possible. This does not mean that all streets must run east and west, but it may require some imaginative lot layouts with the housing units staggered or possibly rotated slightly on the lots so that no unit is in the shadow of the next.

In treed areas the layout should be such as to retain as many of the trees on the windward side of the site as possible to act as a natural windbreak. Care must be exercised in clearing, for the trees will probably have shallow root systems and those retained may be readily blown over. In some areas, conflict will exist between tree retention and exposure to the sunlight, which will require a local decision.

Fire in arctic areas is an ever present threat which can be disastrous in an isolated northern community. Planners must recognize this and ensure that building lots are sufficiently large to provide adequate separation between buildings and to provide access routes for fire fighting equipment.

Lifestyle Needs

The design of living accommodation should be suited to the lifestyle requirements of the residents. In northern Labrador, common areas for the family are the most used, and a large combination cooking/living room is perhaps best suited to these needs. In addition, porches for the storage of equipment and the protection of entrances are essential.

Layouts should be flexible to accommodate families of varying sizes and needs. It is suggested that the community explore the possibilities for two-storey and row housing units.

Many of the comments made should be discussed with suppliers of pre-cut housing units. Additional standards and features can be specified through the tendering process, and, although more costly initially, they will prove their benefits in the long run.

Procedure for Acquisition of Crown Land

Many of the lands for which new residential development is proposed in this Plan are Crown Lands. Proper procedures must be followed to acquire title to the land prior to proceeding with development, as outlined in this section.

The proposed site should be chosen in accordance with the Municipal Plan.

Once the area has been determined, Council should then submit an application to the Crown Lands Division, P.O. Box 370, Goose Bay. This application should be accompanied by information on how the site is to be serviced, and how the development is to be financed. In addition, there should be a description of how the lots are to be disposed of, i.e. by grant to the municipality with Council being responsible for individual lot transfers, by lease through the Crown Lands Division, etc.

When the application has been made, Council should contact the Provincial Planning Division of the Department of Municipal Affairs and Housing and ask their assistance in having the area laid out properly. In many cases, it may be preferable to do this prior to submitting the application.

There are a number of alternatives which could be followed in acquiring Crown Land. For any information further to the above, Council should contact the Crown Lands Division in Goose Bay.

POOR

QUALITY

ORIGINAL